VOL. 2 INDEX

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VOL. 2 INDEX (CONT.)

SHEET NO.	PLAN REFERENCE NO.	TITLE

PLAN REFERENCE NO.

SHEET OF SHEETS

NOTE: ALL SHEET REFERENCES, FIRST NOS. OF STRUCTURE CODE DESIGNATIONS AND MATCH LINE SHEET REFERENCES, ETC., THROUGHOUT THE PLANS, REFER TO THE ENTRY IN THE PLAN REFERENCE NUMBER BOX.

FILE NAME	G:\444304\04 - Design\02 - Design Projects\D00527K - I-5 Dike Access Road Bridge - Bridge Deck and Expansion Joints\20-CADD-Plans\20-11 PS&E Sheets\XL6568 Plans.dgn							Plot 4
TIME	5:39:20 PM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. 0051(321)	PLAN REF. NO. IN2
DATE	6/21/2023				JOB NUMBER 25x302			
PLOTTED BY	MinnicN				CONTRACT NO.		LOCATION NO. XL6568	SHEET 5 OF 30 SHEETS
DESIGNED BY	N. MINNICK							
ENTERED BY								
CHECKED BY								
PROJ. ENGR.	P. REYES							
REGIONAL ADM.	C. FRANCIS	REVISION	DATE	BY				

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

I-5

DIKE ACCESS ROAD BRIDGE

BRIDGE DECK AND EXPANSION JOINTS

INDEX

PROJECT LICENSED PROFESSIONAL CERTIFICATES

Pedro Reyes Jul 5, 2023 AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	Greg Banks Greg Banks (Jul 5, 2023 08:53 PDT) Greg Banks Jul 5, 2023 AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.
AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.
AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.	AS A LICENSED PROFESSIONAL IN DIRECT RESPONSIBLE CHARGE OF DEVELOPING THIS CONTRACT, I CERTIFY THAT ALL PLANS THAT CONTAIN MY STAMP HAVE BEEN DEVELOPED UNDER MY SUPERVISION.

NOTES:

THIS PLAN SET WAS DEVELOPED ELECTRONICALLY UNDER THE DIRECT SUPERVISION OF THE LICENSED PROFESSIONALS THAT HAVE AFFIXED THEIR SIGNATURE TO THIS PAGE.

THIS SHEET SERVES AS THE CERTIFICATION BY THE ABOVE LICENSED PROFESSIONALS OF ALL SHEETS IN THIS PLAN SET WHERE THEIR STAMPS AND SIGNATURES APPEAR.

FILE NAME	G:\444304\04 - Design\02 - Design Projects\D00527K - I-5 Dike Access Road Bridge - Bridge Deck and Expansion Joints\20-CADD-Plans\20-11 PS&E Sheets\XL6568 Plans.dgn
TIME	5:38:30 PM
DATE	6/21/2023
PLOTTED BY	MinnicN
DESIGNED BY	N. MINNICK
ENTERED BY	
CHECKED BY	
PROJ. ENGR.	P. REYES
REGIONAL ADM.	C. FRANCIS

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	0051(321)
JOB NUMBER 25x302		
CONTRACT NO.		LOCATION NO. XL6568

P.E. STAMP BOX DATE

P.E. STAMP BOX DATE

Washington State Department of Transportation

I-5
DIKE ACCESS ROAD BRIDGE
BRIDGE DECK AND EXPANSION JOINTS

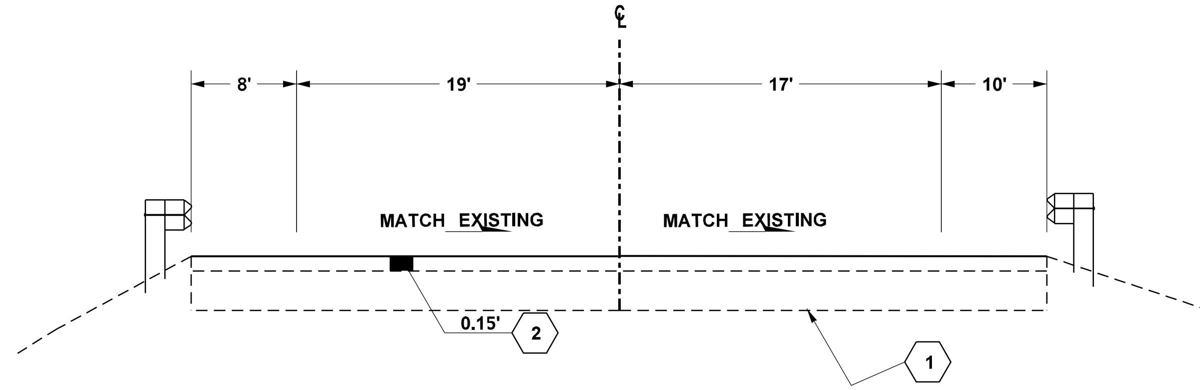
CERTIFICATION SHEET

PLAN REF NO CT1

SHEET 6 OF 30 SHEETS

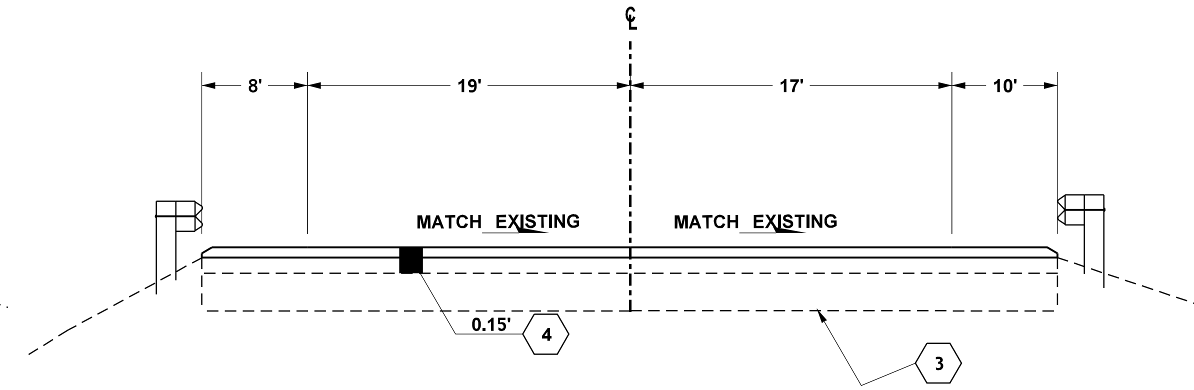
LEGEND

- EXISTING EDGE LINE
- EXISTING MEDIAN EDGE LINE
- EXISTING OUTSIDE EDGE LINE
- EXISTING LANE LINE
- CURB OF BRIDGE
- TEMPORARY BARRIER
- GUARDRAIL
- TEMPORARY LANE LINES
- PAVING SECTION



ROADWAY SECTION A-1

100' FROM BRIDGE EXPANTION JOINT
TO
50' FROM BRIDGE EXPANSION JOINT



ROADWAY SECTION A-2

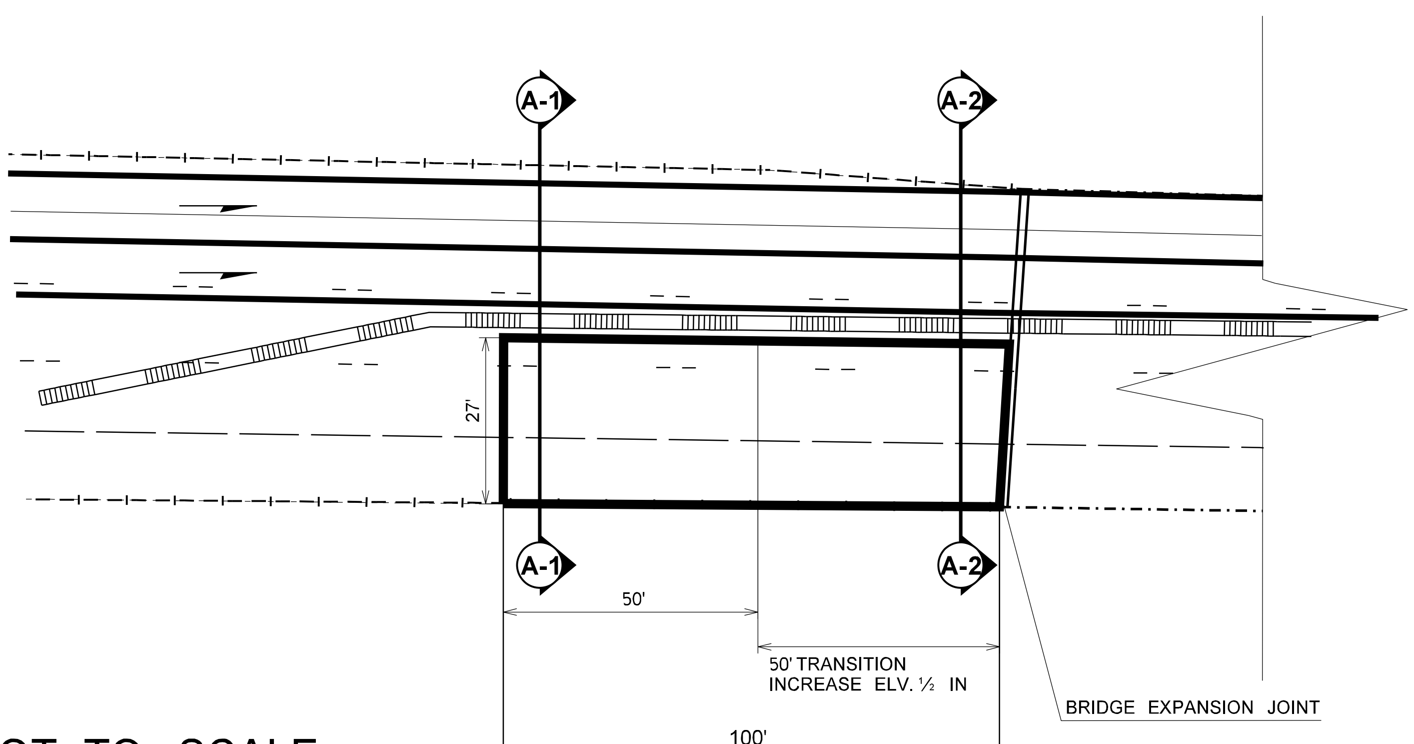
BRIDGE EXPANSION JOINT
TO
50' FROM BRIDGE EXPANSION JOINT

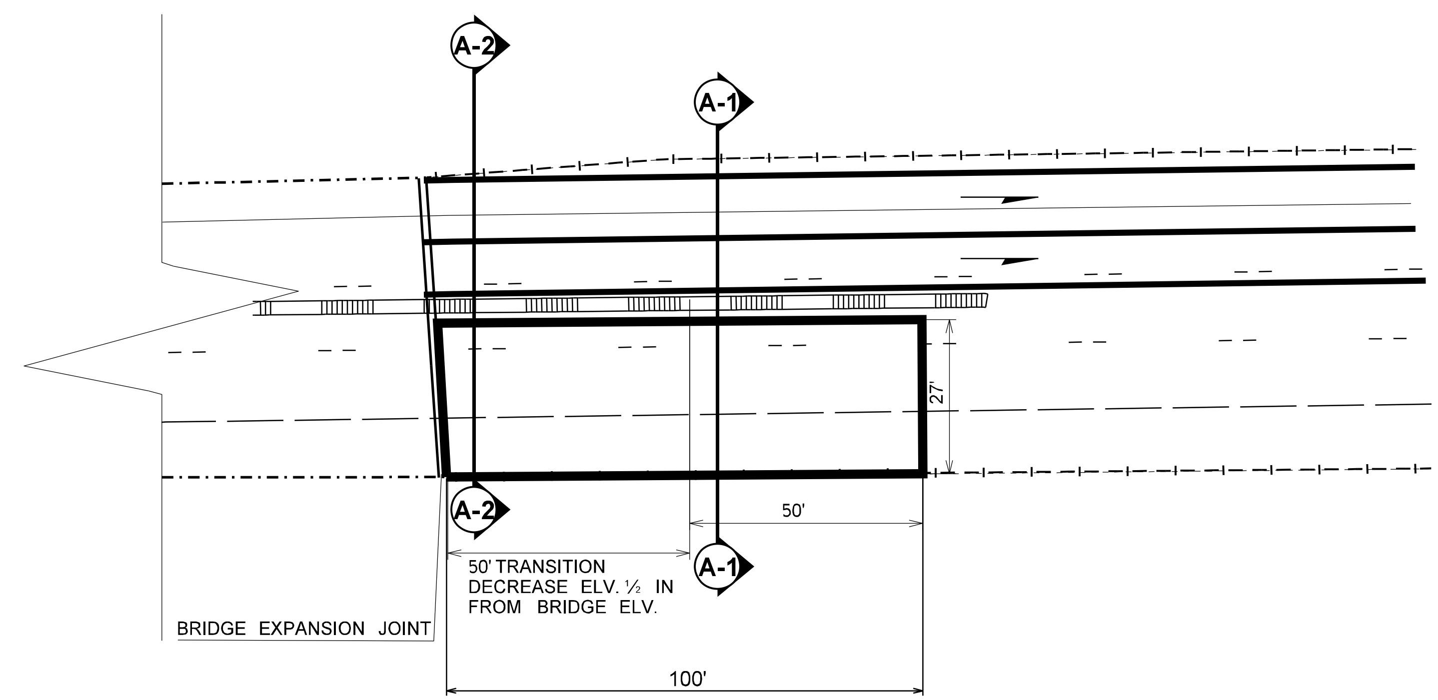
(1) SEE ROADWAY SECTION A ON SHEET PV3 FOR DETAILS OF THE PROFILE GRIND

(2) HMA CL ⅜ IN. PG 58V-22
UP TO EXISTING ROADWAY ELEVATION

(3) SEE ROADWAY SECTION A ON SHEET PV3 FOR DETAILS OF THE PROFILE GRIND

(4) HMA CL ⅜ IN. PG 58V-22
0.15' LIFT
MATCH NEW BRIDGE JOINT ELEVATION





NOT TO SCALE

FILE NAME	G:\444304\04 - Design\02 - Design Projects\D00527K - I-5 Dike Access Road Bridge - Bridge Deck and Expansion Joints\20-CADD-Plans\20-11 PS&E Sheets\XL6568-PLAN SHEETS.dgn			
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DATE	6/30/2023			
PLOTTED BY	MinnicN			
DESIGNED BY	N. MINNICK			
ENTERED BY				
CHECKED BY				
PROJ. ENGR.	P. REYES			
REGIONAL ADM.	C. FRANCIS	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	0051(321)
JOB NUMBER 25x302		
CONTRACT NO.		LOCATION NO. XL6568

PEDRO VERDUZCO REYES · STATE OF WASHINGTON · 49524 · REGISTERED · PROFESSIONAL ENGINEER

P.E. STAMP BOX — DATE

P.E. STAMP BOX — DATE

Washington State
Department of Transportation

I-5
DIKE ACCESS ROAD BRIDGE
BRIDGE DECK AND EXPANSION JOINTS

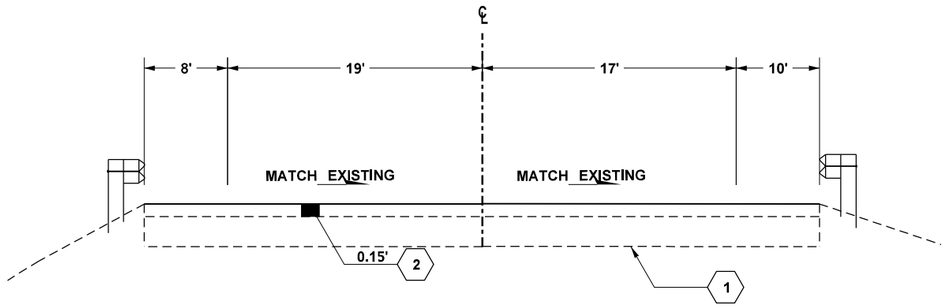
STAGE A PAVING PLANS

PLAN REF NO PV1

SHEET 7 OF 30 SHEETS

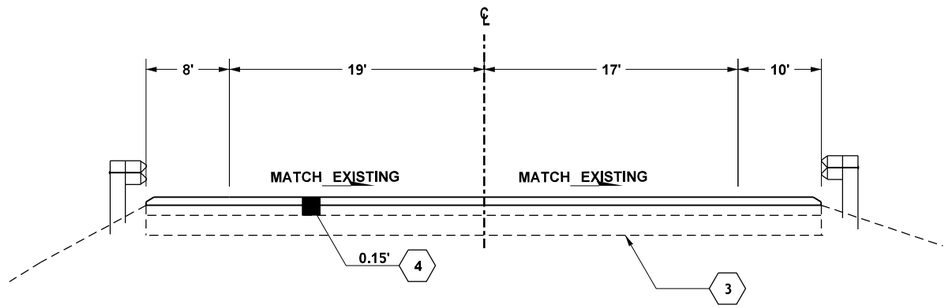
LEGEND

- EXISTING EDGE LINE
- EXISTING MEDIAN EDGE LINE
- EXISTING OUTSIDE EDGE LINE
- EXISTING LANE LINE
- CURB OF BRIDGE
- TEMPORARY BARRIER
- GUARDRAIL
- TEMP LANE LINES
- PAVING SECTION



ROADWAY SECTION B-1

100' FROM BRIDGE EXPANTION JOINT
TO
50' FROM BRIDGE EXPANSION JOINT

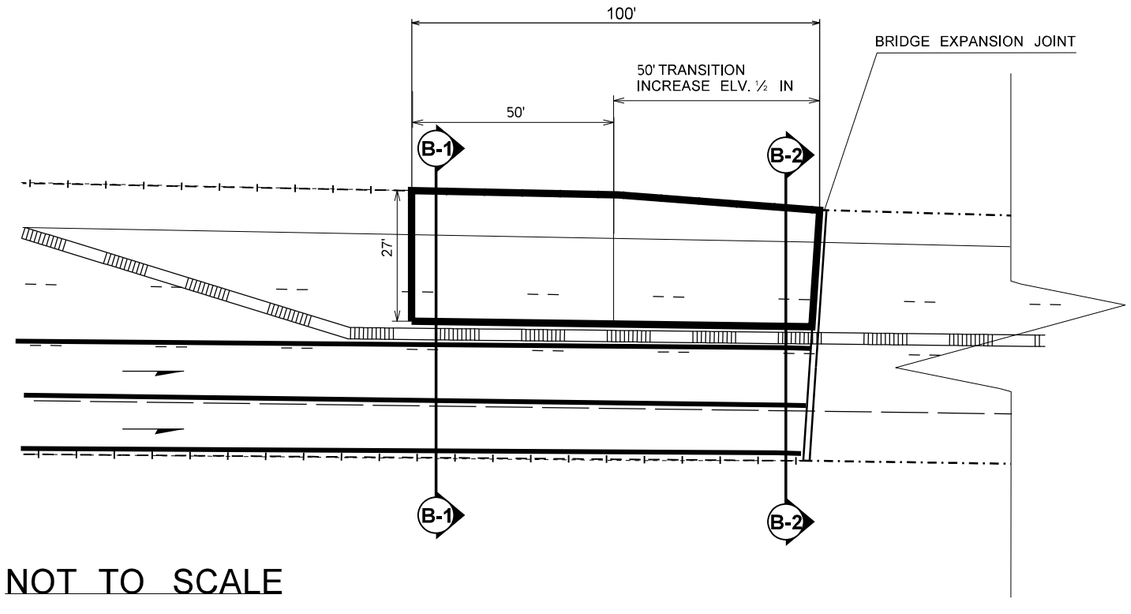


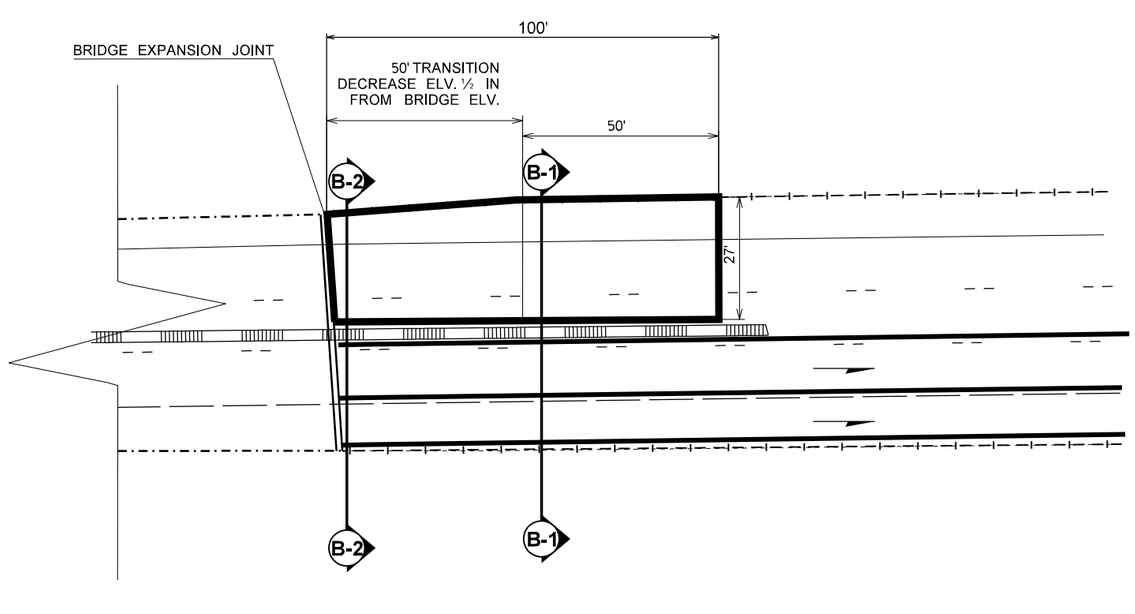
ROADWAY SECTION B-2

BRIDGE EXPANSION JOINT
TO
50' FROM BRIDGE EXPANSION JOINT

1. GRIND 0.15' FROM EXISTING ROADWAY
2. HMA CL ⅛ IN. PG 58V-22
   UP TO EXISTING ROADWAY ELEVATION

3. GRIND TRANSISION SECTION.
   50' FROM BRIDGE EXPANSION JOINT START GRIND DEPTH AT 0.15'
   DECREASE GRIND DEPTH BY 1/2" AT BRIDGE EXPANSION JOIN
4. HMA CL ⅛ IN. PG 58V-22
   0.15' LIFT
   MATCH NEW BRIDGE JOINT ELEVATION





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FILE NAME	G:\444304\04 - Design\02 - Design Projects\D00527K - I-5 Dike Access Road Bridge - Bridge Deck and Expansion Joints\20-CADD-Plans\20-11 PS&E Sheets\XL6568 PLAN SHEETS.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. 0051(321)	PLAN REF NO PV2
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DATE	6/30/2023				CONTRACT NO.		LOCATION NO. XL6568	
PLOTTED BY	MinnicN							
DESIGNED BY	N. MINNICK							
ENTERED BY								
CHECKED BY								
PROJ. ENGR.	P. REYES							
REGIONAL ADM.	C. FRANCIS	REVISION	DATE	BY				

PEDRO VERDUZCO REYES — STATE OF WASHINGTON — 49524 — REGISTERED PROFESSIONAL ENGINEER

DATE
P.E. STAMP BOX

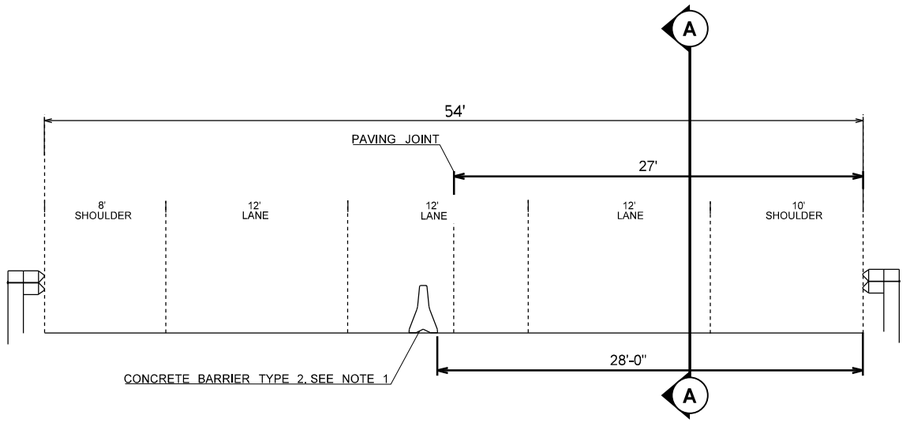
DATE
P.E. STAMP BOX

Washington State Department of Transportation

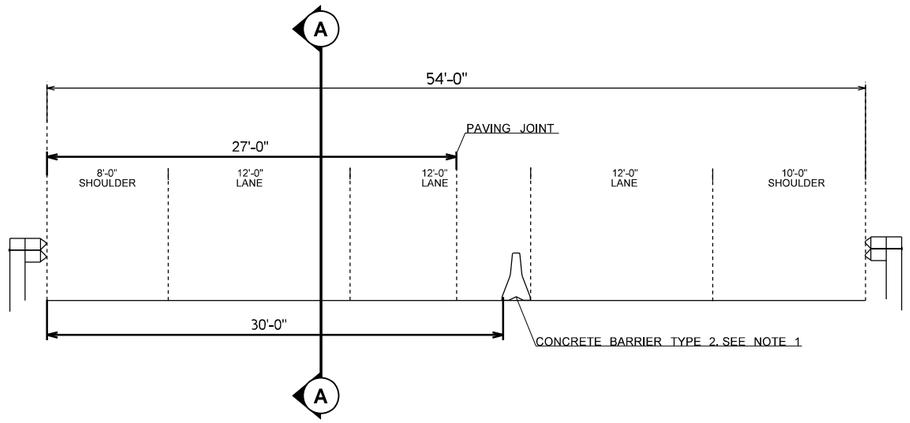
I-5
DIKE ACCESS ROAD BRIDGE
BRIDGE DECK AND EXPANSION JOINTS

STAGE B PAVING PLANS

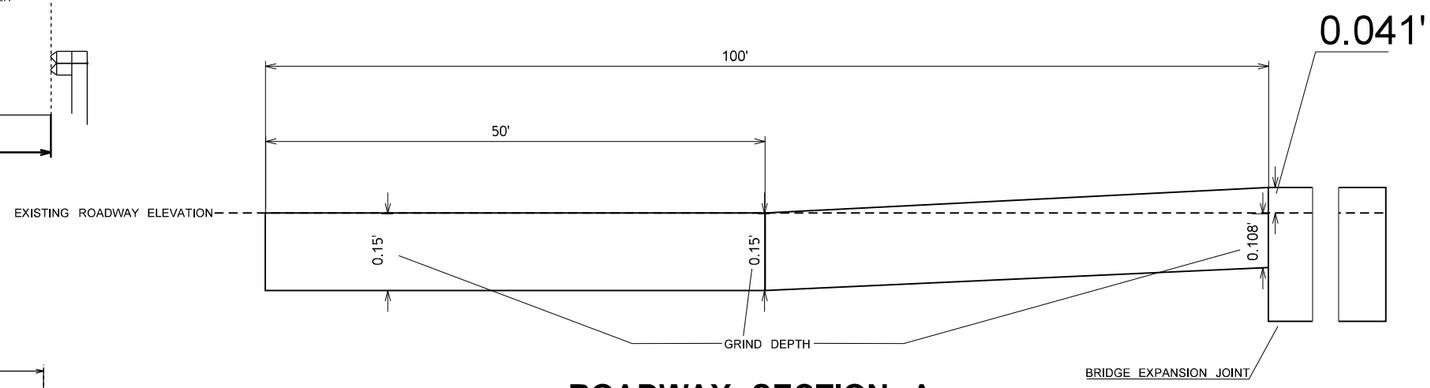
ROADWAY SECTIONS FOR LAYOUT OF HMA PAVING



STAGE A LOOKING SOUTHBOUND



STAGE B LOOKING SOUTHBOUND



ROADWAY SECTION A

NOT TO SCALE

NOTES:

1. TEMPORARY CONCRETE BARRIER TYPE 2 SHALL BE ANCHORED WITH A TYPE 1 OR TYPE 3 ANCHOR. SEE STD. PLN. K-80.35

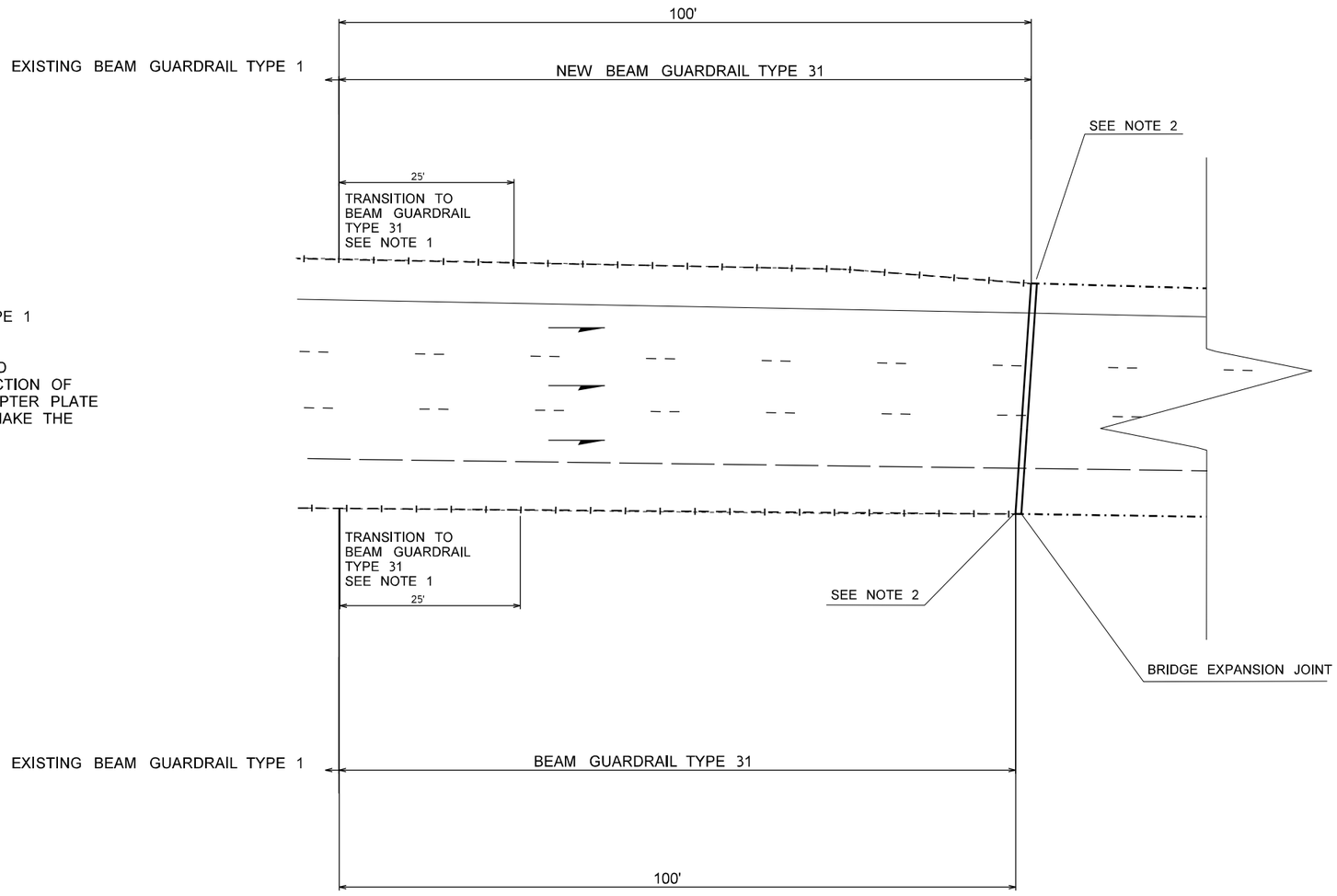
FILE NAME	G:\444304\04 - Design\02 - Design Projects\D00527K - I-5 Dike Access Road Bridge - Bridge Deck and Expansion Joints\20-CADD-Plans\20-11 PS&E Sheets\XL6568_PLAN SHEETS.dgn				REGION NO. / STATE	FED.AID PROJ.NO.	Washington State Department of Transportation	I-5 DIKE ACCESS ROAD BRIDGE BRIDGE DECK AND EXPANSION JOINTS
TIME	7:11:14 AM				10 / WASH	0051(321)		PLAN REF NO PV3
DATE	6/30/2023				JOB NUMBER 25x302			SHEET 9 OF 30 SHEETS
PLOTTED BY	MinnicN				CONTRACT NO.	LOCATION NO. XL6568		PAVING PLANS
DESIGNED BY	N. MINNICK							
ENTERED BY								
CHECKED BY								
PROJ. ENGR.	P. REYES							
REGIONAL ADM.	C. FRANCIS	REVISION	DATE	BY	P.E. STAMP BOX / DATE	P.E. STAMP BOX / DATE		

LEGEND

- EXISTING EDGE LINE
- EXISTING MEDIAN EDGE LINE
- EXISTING OUTSIDE EDGE LINE
- EXISTING LANE LINE
- CURB OF BRIDGE
- TEMPORARY BARRIER
- GUARDRAIL

NOTES:

1. BEAM GUARDRAIL TYPE 31 TO BEAM GUARDRAIL TYPE 1 ADAPTOR. SEE STANDARD PLAN C-25.80-05
2. FOR GUARDRAIL CONNECTION TO THE BRIDGE USE D CONNECTION OR F CONNECTION DEPENDING ON DIRCTION OF TRAFFIC IN STANDARD PLAN C-24.10-03. ALSO AN ADAPTER PLATE IN STANDARD PLAN C-24.15-00 WILL BE NEEDED TO MAKE THE CONNECTION.
3. CASE 2 WILL BE USED FOR BEAM GUARDRAIL POST INSTALLATION.



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PLOTTED BY	MinnicN						
DESIGNED BY	N. MINNICK			JOB NUMBER 25x302			
ENTERED BY							
CHECKED BY				CONTRACT NO.		LOCATION NO. XL6568	
PROJ. ENGR.	P. REYES						
REGIONAL ADM.	C. FRANCIS	REVISION	DATE	BY			

PEDRO VERDUZCO REYES — STATE OF WASHINGTON — 49534 — REGISTERED PROFESSIONAL ENGINEER

DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

Washington State Department of Transportation

I-5
DIKE ACCESS ROAD BRIDGE
BRIDGE DECK AND EXPANSION JOINTS

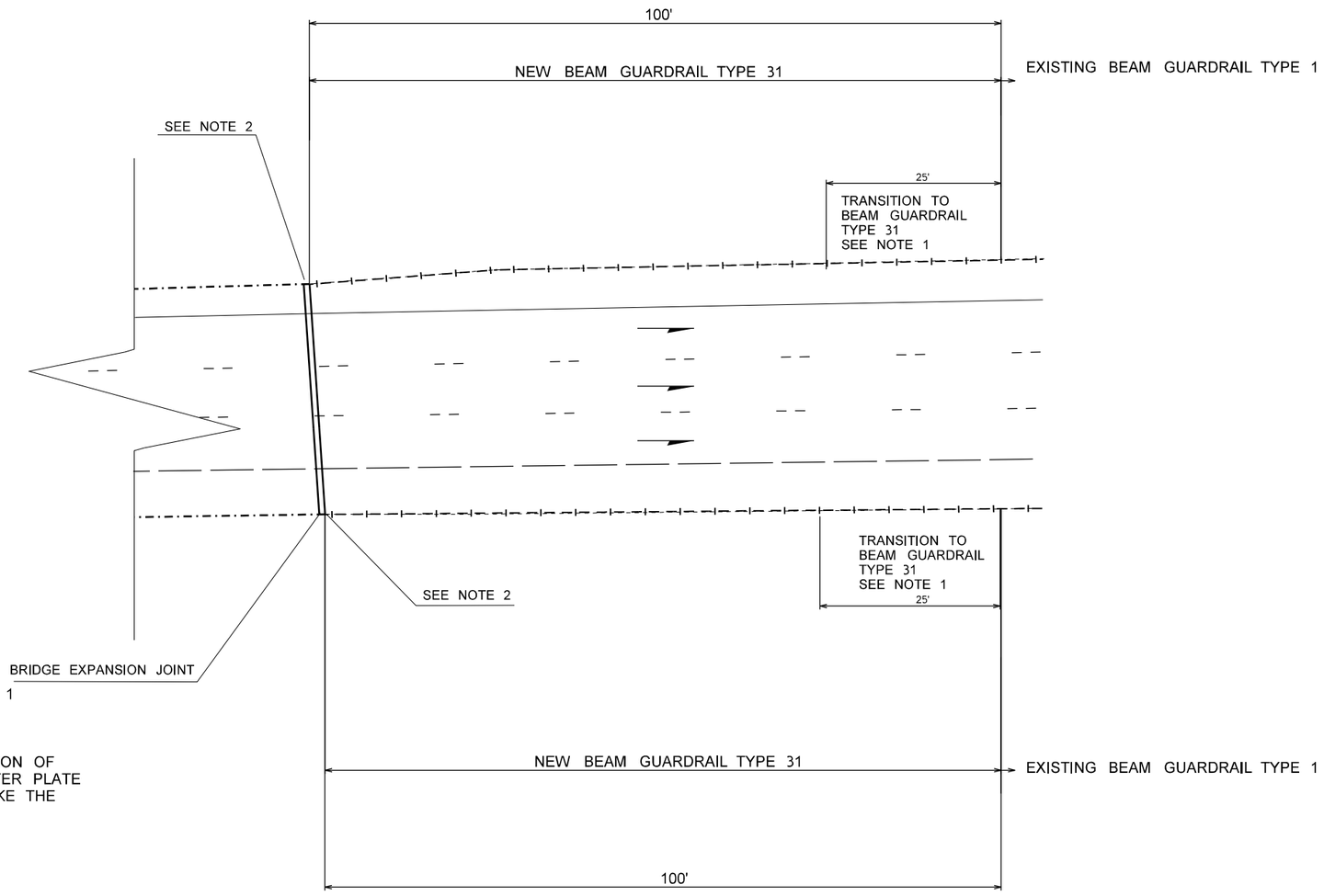
GUARDRAIL PLANS

PLAN REF NO GR1

SHEET 10 OF 30 SHEETS

LEGEND

- EXISTING EDGE LINE
- EXISTING MEDIAN EDGE LINE
- EXISTING OUTSIDE EDGE LINE
- EXISTING LANE LINE
- CURB OF BRIDGE
- TEMPORARY BARRIER
- GUARDRAIL



NOTES:

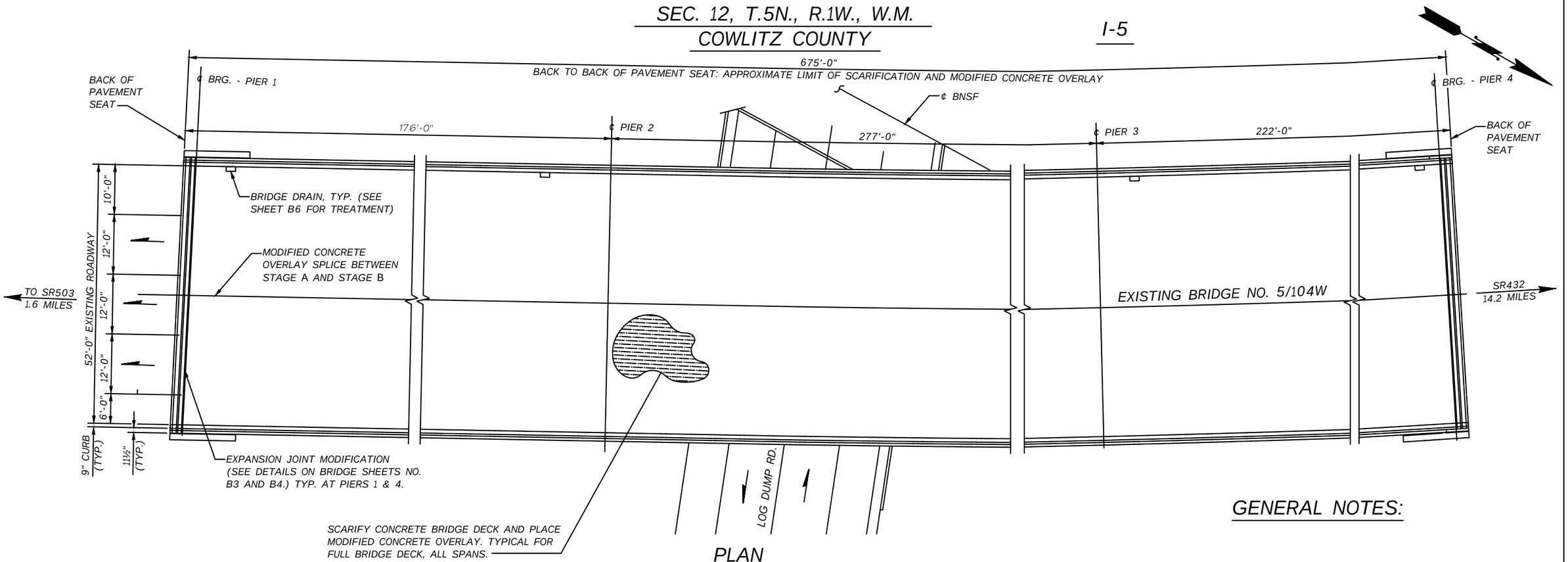
1. BEAM GUARDRAIL TYPE 31 TO BEAM GUARDRAIL TYPE 1 ADAPTOR. SEE STANDARD PLAN C-25.80-05
2. FOR GUARDRAIL CONNECTION TO THE BRIDGE USE D CONNECTION OR F CONNECTION DEPENDING ON DIRCTION OF TRAFFIC IN STANDARD PLAN C-24.10-03. ALSO AN ADAPTER PLATE IN STANDARD PLAN C-24.15-00 WILL BE NEEDED TO MAKE THE CONNECTION.
3. CASE 2 WILL BE USED FOR BEAM GUARDRAIL POST INSTALLATION.

NOT TO SCALE

FILE NAME	G:\444304\04 - Design\02 - Design Projects\D00527K - I-5 Dike Access Road Bridge - Bridge Deck and Expansion Joints\20-CADD-Plans\20-11 PS&E Sheets\XL6568_PLAN_SHEETS.dgn				REGION NO. / STATE	FED.AID PROJ.NO.			PLAN REF NO
TIME	7:12:00 AM				10 WASH	0051(321)		Washington State Department of Transportation	GR2
DATE	6/30/2023				JOB NUMBER				
PLOTTED BY	MinnicN				25x302			I-5 DIKE ACCESS ROAD BRIDGE BRIDGE DECK AND EXPANSION JOINTS	SHEET 11 OF 30 SHEETS
DESIGNED BY	N. MINNICK				CONTRACT NO.	LOCATION NO.			
ENTERED BY						XL6568			
CHECKED BY									
PROJ. ENGR.	P. REYES								
REGIONAL ADM.	C. FRANCIS	REVISION	DATE	BY			P.E. STAMP BOX / DATE	P.E. STAMP BOX / DATE	GUARDRAIL PLANS

SEC. 12, T.5N., R.1W., W.M.
COWLITZ COUNTY

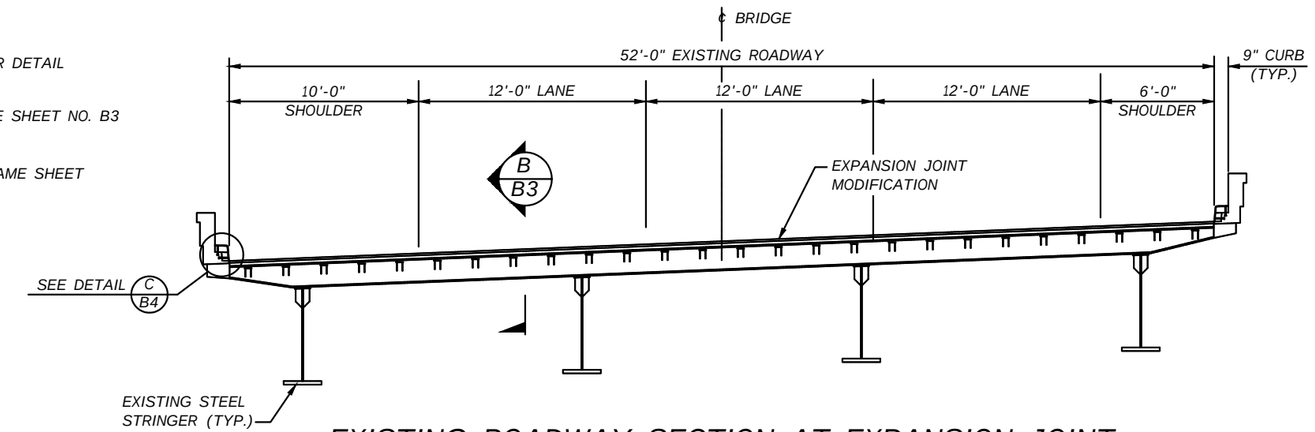
I-5



PLAN

LEGEND

- B / B3 — IDENTIFIES SECTION, VIEW OR DETAIL; TAKEN OR SHOWN ON BRIDGE SHEET NO. B3
- B / — TAKEN OR SHOWN ON THE SAME SHEET



EXISTING ROADWAY SECTION AT EXPANSION JOINT

GENERAL NOTES:

1. ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION - DATED 2023.
2. THE MODIFICATIONS TO THIS STRUCTURE HAVE BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS - NINTH EDITION, 2020 AMENDMENTS.
3. EXISTING FEATURES, STATIONING AND DIMENSIONS ARE BASED ON INSPECTION REPORTS AND AS-BUILT PLANS. ALL DIMENSIONS NOTED SHALL BE FIELD MEASURED BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS AND PROCEEDING WITH CONSTRUCTION.
4. A SUGGESTED CONSTRUCTION SEQUENCE AND TRAFFIC STAGING SCHEME IS SHOWN ON BRIDGE SHEET NO. B2. CONTRACTOR SHALL SUBMIT ANY PROPOSED CHANGES TO THIS SCHEME TO THE ENGINEER FOR APPROVAL.

MODIFIED CONCRETE OVERLAY AND EXPANSION JOINT MODIFICATION

FILE NAME	BR_5-104W.DWG			REGION NO.	STATE
BRIDGE DES. ENG.	A. LELAND			10	WASH
BRIDGE PROJ. ENG.	N. RODDA			JOB NUMBER	
SUPERVISOR	-			25x302	
DESIGNED BY	M. BARBER			CONTRACT NO.	
CHECKED BY	K. HJORTESET				
ENTERED BY	P. LAVOCHIN				
PRELIM. PLAN BY	-				
ARCH. / SPEC.	-	REVISION	DATE	BY	

WSDOT WSP

GREGORY A. BANKS — STATE OF WASHINGTON — 45120 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER
6-30-2023
DATE
SEE SHEET CT1
P.E. STAMP BOX

SEE SHEET CT1
DATE
P.E. STAMP BOX

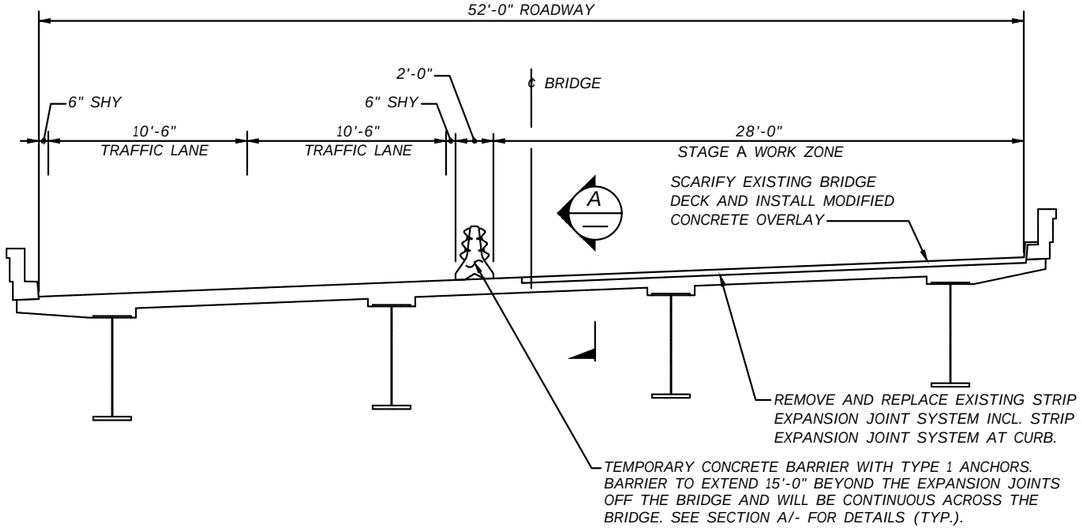
I-5
DIKE ACCESS ROAD BRIDGE
BRIDGE DECK AND EXPANSION JOINTS
I-5 OVER BNSF AND DIKE ROAD BR NO. 5/104W
LAYOUT

PLAN REF NO: B1
SHEET 12 OF 30 SHEETS

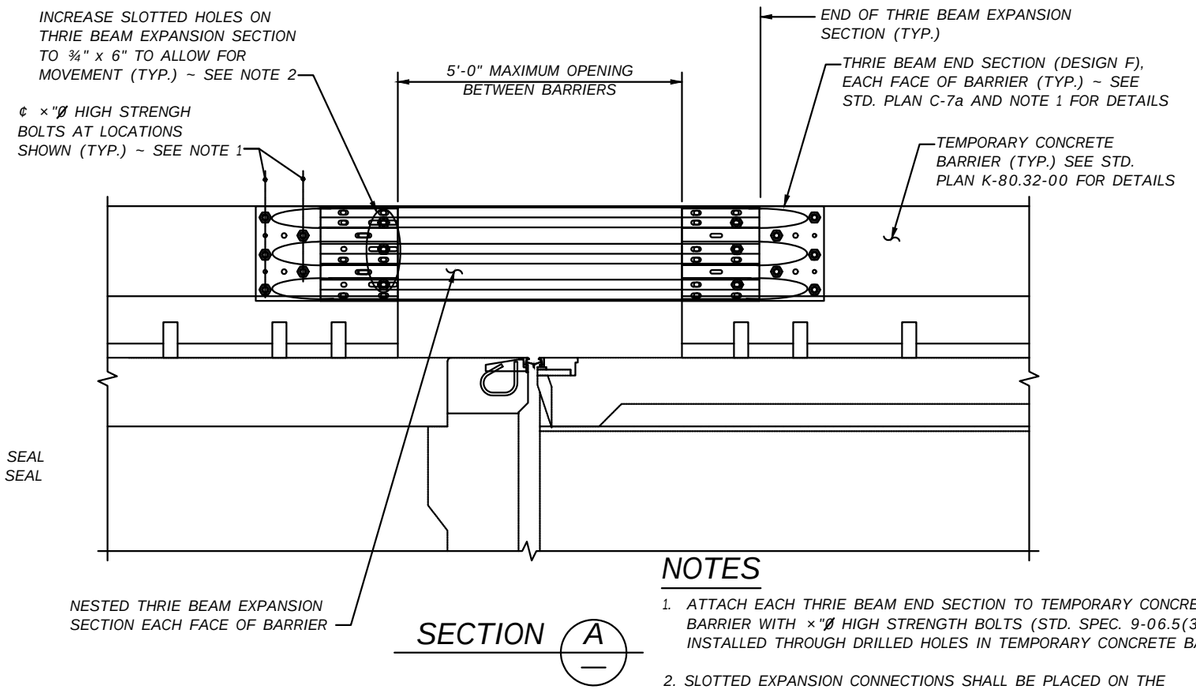
PLOT DATE: 6/30/23 PLOT TIME: 11:13 AM PLOTTED BY: USPL67544 FILE PATH: R:\USFDW100\PROJECT\2022\30902269- WSDOT BSO STAFF AUGMENTATION\30902269.001 - BRIDGE 5_104W DECK_EXPANSION\CADD\SHEETS

SR I-5 BRIDGE SHEET 19 OF 29 FILE NO. -

C.S. 0000 ~ PROJ. NO. AA000A ~ SOUTHWEST REGION ~ BRIDGE NO. 5/104W ~ I 5 OVER BNSF AND DIKE ROAD BR. NO. 5/104W



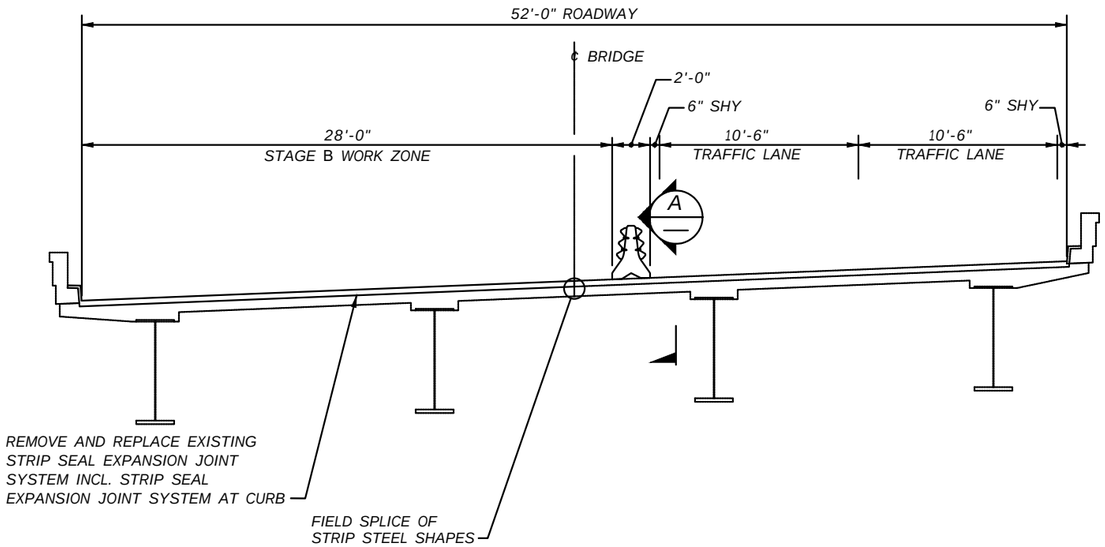
ROADWAY SECTION - STAGE A



SECTION A

NOTES

1. ATTACH EACH THRIE BEAM END SECTION TO TEMPORARY CONCRETE BARRIER WITH ×"Ø HIGH STRENGTH BOLTS (STD. SPEC. 9-06.5(3)) INSTALLED THROUGH DRILLED HOLES IN TEMPORARY CONCRETE BARRIER.
2. SLOTTED EXPANSION CONNECTIONS SHALL BE PLACED ON THE TRAFFIC FLOW'S TRAILING END ONLY. BOLTS AT SLOTTED EXPANSION CONNECTIONS SHALL BE DOUBLE NUTS AND HAND TIGHTENED ONLY TO ACCOMMODATE EXPANSION.
3. SEE STD. PLAN K-80.32-00 FOR TEMPORARY CONCRETE BARRIER AND STD. PLAN K-80.35-01 FOR TYPE 1 ANCHOR DETAILS. PLACE ADDITIONAL ANCHOR ATTACHMENT BETWEEN THE EDGE OF BARRIER AND FIRST ANCHOR ATTACHMENT FOR EACH SIDE OF THE OPENING.
4. CONTRACTOR HAS THE OPTION OF PLACING THE THRIE BEAM ON THE TRAFFIC SIDE ONLY FOR EACH STAGE.



ROADWAY SECTION - STAGE B

SUGGESTED CONSTRUCTION SEQUENCE

1. INSTALL TEMPORARY TRAFFIC BARRIER FOR THE STAGE A WORK ZONE AND CONFIGURE TRAFFIC ACCORDINGLY.
2. WITHIN THE STAGE A WORK ZONE, REMOVE APPROACH PAVING AND EXISTING STRIP SEAL EXPANSION JOINT SYSTEM INCLUDING HEADERS AND CONCRETE AT TOP OF ABUTMENT STEM WALLS TO THE LIMITS SHOWN IN THE PLANS.
3. INSTALL STRIP SEAL STEEL EDGE BEAMS: PLACE AND CURE CONCRETE AT ABUTMENT STEM WALL, WELD BRIDGE SIDE EDGE BEAM IN PLACE.
4. SCARIFY BRIDGE DECK WITHIN WORK ZONE.
5. PREPARE DECK SURFACE, INSTALL, AND CURE MODIFIED CONCRETE OVERLAY.
6. INSTALL AND CURE POLYESTER OR ELASTOMERIC CONCRETE AT STRIP SEAL EXPANSION JOINT HEADERS.
7. FOLLOWING THE CURE OF POLYESTER OR ELASTOMERIC CONCRETE HEADERS AND OF THE MODIFIED CONCRETE OVERLAY AND THE INSTALLATION OF THE STRIP SEAL IN THE STAGE A WORK ZONE AND SUBSEQUENT INSPECTION AND ACCEPTANCE BY THE ENGINEER, REMOVE, RELOCATE, AND REINSTALL TEMPORARY CONCRETE TRAFFIC BARRIER FOR THE STAGE B WORK ZONE.
8. CONFIGURE TRAFFIC ACCORDINGLY AND THEN REPEAT STEPS 2, 3, 4, 5, AND 6 IN THE STAGE B WORK ZONE.
9. FOLLOWING THE CURE OF POLYESTER OR ELASTOMERIC CONCRETE HEADERS AND OF THE MODIFIED CONCRETE OVERLAY AND THE INSTALLATION OF THE STRIP SEAL IN THE STAGE B WORK ZONE AND SUBSEQUENT INSPECTION AND ACCEPTANCE BY THE ENGINEER, REMOVE THE TEMPORARY CONCRETE TRAFFIC BARRIER, REESTABLISH CHANNELIZATION, AND REOPEN ALL LANES OF TRAFFIC.
10. THE GLAND SHALL BE A SINGLE CONTINUOUS PIECE. CONTRACTOR HAS THE OPTION TO INSTALL THE GLAND AS A SINGLE OPERATION AFTER STAGE B COMPLETION OR ROLL UP THE UNINSTALLED STAGE B PORTION OF THE GLAND AFTER STAGE A WORK AND PIN IT UNDERNEATH THE ROADWAY UNTIL STAGE B HAS BEEN COMPLETED. CARE SHALL BE EXERCISED TO PREVENT DAMAGE TO THE GLAND.

FILE NAME	BR_5-104W.DWG				REGION NO. 10	STATE WASH
BRIDGE DES. ENG.	A. LELAND					
BRIDGE PROJ. ENG.	N. RODDA					
SUPERVISOR	-				JOB NUMBER 25x302	
DESIGNED BY	M. BARBER					
CHECKED BY	K. HJORTESET					
ENTERED BY	P. LAVOCHIN				CONTRACT NO.	
PRELIM. PLAN BY	-					
ARCH. / SPEC.	-	**REVISION**	**DATE**	**BY**		

WSDOT WSP

GREGORY A. BANKS — STATE OF WASHINGTON — 45120 — PROFESSIONAL ENGINEER — CIVIL ENGINEER

6-30-2023
DATE
SEE SHEET CT1
P.E. STAMP BOX

SEE SHEET CT1
DATE
P.E. STAMP BOX

I-5
DIKE ACCESS ROAD BRIDGE
BRIDGE DECK AND EXPANSION JOINTS
I-5 OVER BNSF AND DIKE ROAD BR NO. 5/104W

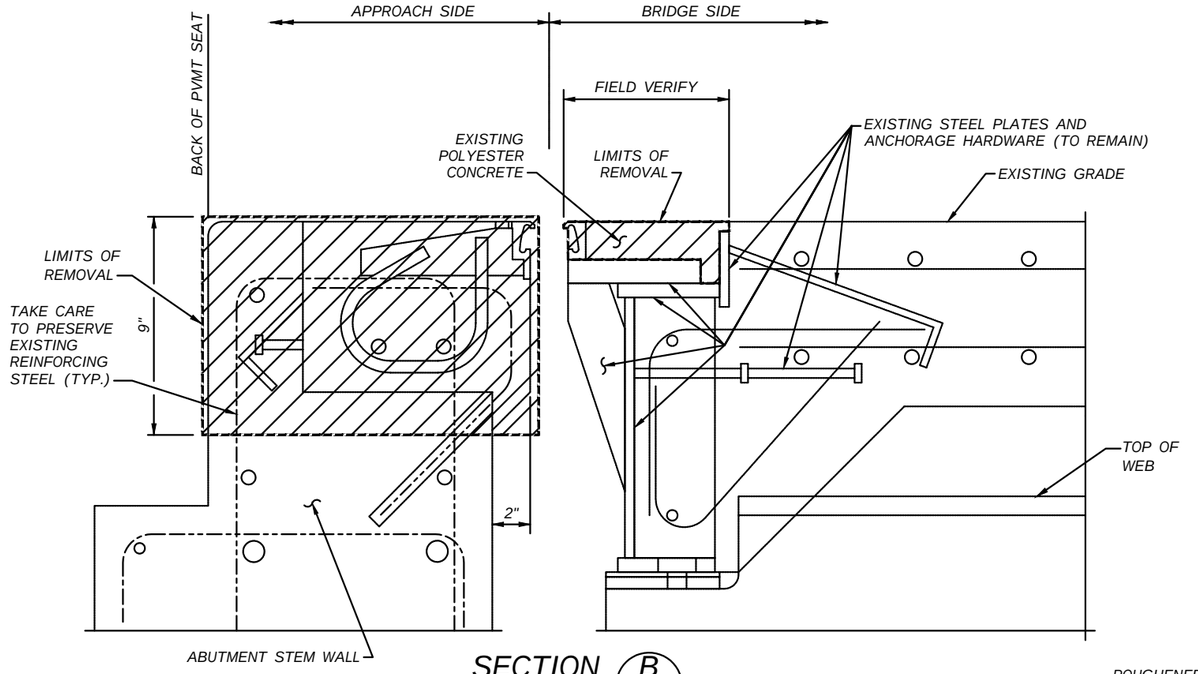
SUGGESTED CONSTRUCTION SEQUENCE

PLAN REF NO: B2

SHEET 13 OF 30 SHEETS

SR I-5 BRIDGE SHEET 20 OF 29 FILE NO. -

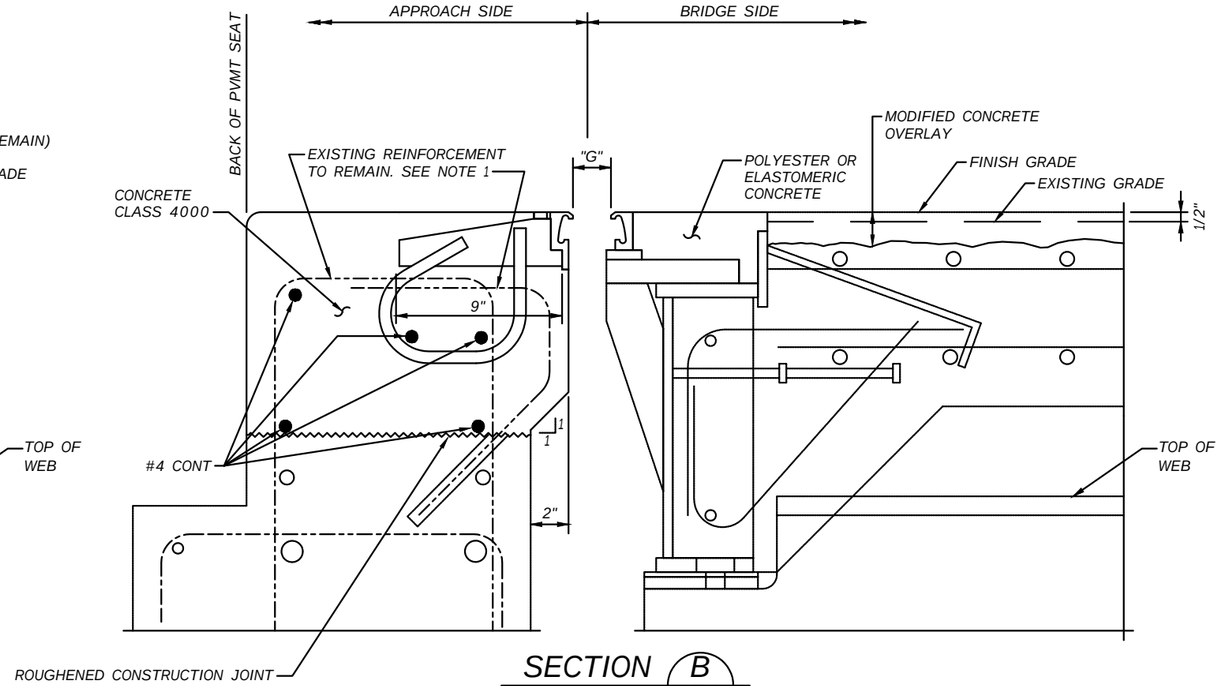
PLOT DATE: 6/30/23 PLOT TIME: 11:13 AM PLOTTED BY: USPL67544 FILE PATH: R:\USFDW100\PROJECT\2022\30902269- WSDOT BSO STAFF AUGMENTATION\30902269.001 - BRIDGE 5_104W DECK_EXPANSION\CADD\SHEETS



SECTION B / B1

EXISTING CONDITION

NOTE: EXPANSION JOINT WORK SHOWN IN THIS VIEW. SEE SHEETS B5 AND B6 FOR DECK REHABILITATION WORK



SECTION B / B1

MODIFIED CONDITION

NOTE: EXPANSION JOINT RESTORATION SHOWN IN THIS VIEW. SEE SHEETS B5 AND B6 FOR MODIFIED CONCRETE OVERLAY WORK.

NOTE 1:
ANY EXISTING REINFORCEMENT TO REMAIN THAT IS DAMAGED DURING DEMOLITION SHALL BE REPLACED IN KIND. REPLACEMENT REINFORCEMENT SHALL BE DRILLED IN AND BONDED USING APPROVED EPOXY-RESIN BONDING AGENT, EMBEDDED 8 INCHES.

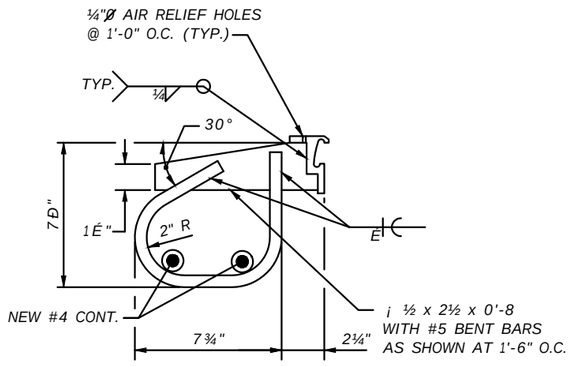
4" MOTION RANGE

MANUFACTURER	ITEM NAME	OPENING "G" NORMAL TO JT.		MIN. INSTALLATION WIDTH NORMAL TO JOINT	OPENING "G" NORMAL TO JT.		
		MIN.	MAX.		@40°F	@64°F	@80°F
D.S. BROWN	STEELFLEX STRIP SEAL EJS A2R-400	1/2"	4 1/2"	1 1/2"	2 7/8"	2 1/4"	1 7/8"
WATSON BOWMAN ACME	WABO STRIP SEAL SE-400	0"	4"	1 1/2"	2 5/8"	2"	1 5/8"
R. J. WATSON, INC.	R. J. STRIP SEAL 400	0"	4"	1 1/2"	2 5/8"	2"	1 5/8"

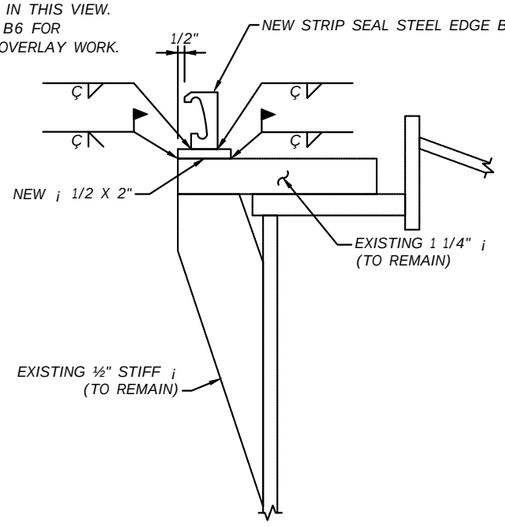
STEEL SHAPE TYPES

MANUFACTURER	ITEM NAME	S / T			V / W		
		TYPE	S	T	TYPE	V	W
D.S. BROWN	STEELFLEX RAIL	SSCM2 *	1 1/4"	3 3/4"	SSA2	1 1/4"	2"
WATSON BOWMAN ACME	WABO STRIP SEAL	R	1 1/4"	3 1/4"	A	1 1/4"	2"
R. J. WATSON, INC.	RJ STRIP SEAL	RJM	2 3/4"	3 1/4"	RJA	1 1/4"	2"

* TRIM VERTICAL LEG OF SSCM2 SHAPE FOR USE IN TRAFFIC BARRIER



STRIP SEAL ANCHORAGE AT CONCRETE APPROACH ENDS



STRIP SEAL ANCHORAGE AT STEEL GIRDER ENDS

FILE NAME	BR_5-104W.DWG				REGION NO.	STATE
BRIDGE DES. ENG.	A. LELAND				10	WASH
BRIDGE PROJ. ENG.	N. RODDA				JOB NUMBER	
SUPERVISOR	-				25x302	
DESIGNED BY	M. BARBER				CONTRACT NO.	
CHECKED BY	K. HJORTESET					
ENTERED BY	P. LAVOCHIN					
PRELIM. PLAN BY	-					
ARCH. / SPEC.	-	REVISION	DATE	BY		

WSDOT WSP

GREGORY A. BANKS — STATE OF WASHINGTON — 45120 — PROFESSIONAL ENGINEER — 6-30-2023

P.E. STAMP BOX — SEE SHEET CT1 DATE

P.E. STAMP BOX — SEE SHEET CT1 DATE

I-5
DIKE ACCESS ROAD BRIDGE
BRIDGE DECK AND EXPANSION JOINTS
I-5 OVER BNSF AND DIKE ROAD BR NO. 5/104W

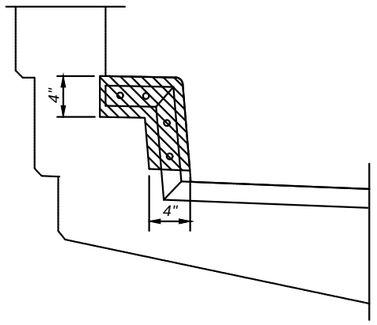
EXPANSION JOINT DETAILS
1 OF 2

PLAN REF NO: B3

SHEET 14 OF 30 SHEETS

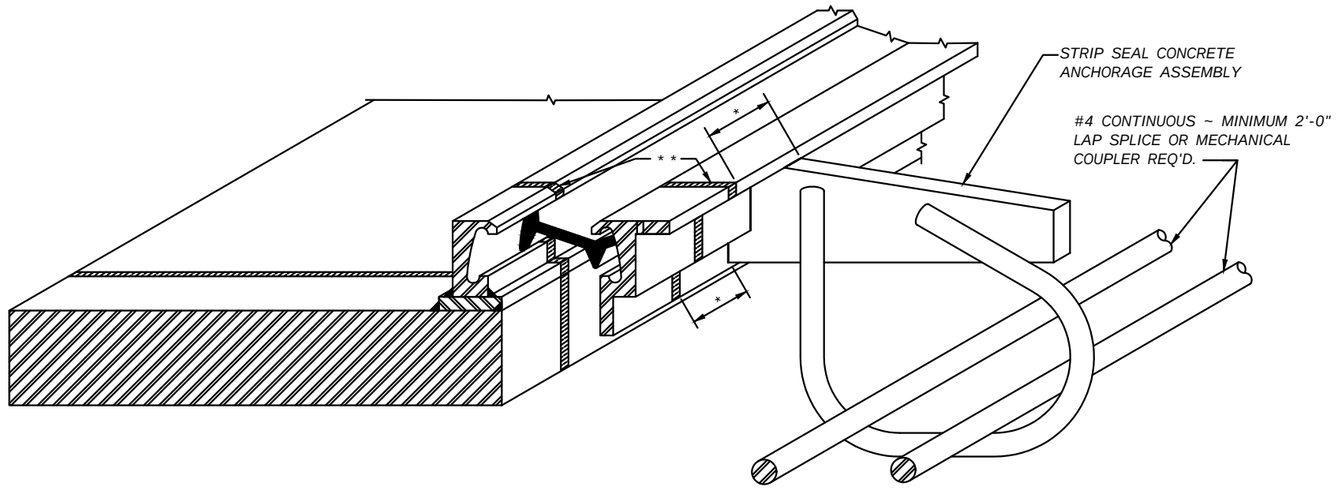
SR I-5 BRIDGE SHEET 21 OF 29 FILE NO. -

PLOT DATE: 6/30/23 PLOT TIME: 11:13 AM PLOTTED BY: USPL67544 FILE PATH: R:\USFDW100\PROJECT\2022\30902269- WSDOT BSO STAFF AUGMENTATION\30902269.001 - BRIDGE 5_104W DECK_EXPANSION\CADD\SHEETS



CURB DETAIL (C / B1)

EXISTING CONDITION
TYPICAL @ 2 LOCATIONS
APPROACH SIDE AT
PIERS 1 & 4

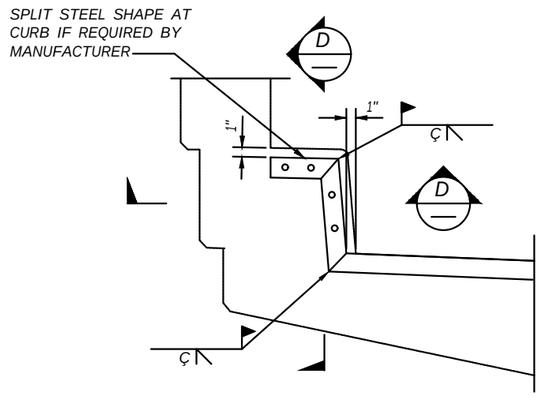


WELDED FIELD SPLICE

WELDED FIELD SPLICE LOCATIONS SHALL BE COORDINATED WITH CONSTRUCTION STAGING REQUIREMENTS AND IS SUBJECT TO THE APPROVAL OF THE ENGINEER

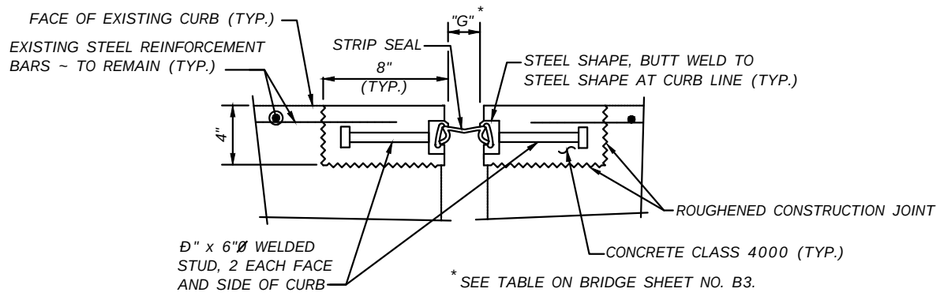
* 4" MAXIMUM DISTANCE FROM SPLICE TO STRIP SEAL CONCRETE ANCHORAGE ASSEMBLY

* * WELD OF STEEL SHAPE SHALL BE IN ACCORDANCE WITH THE APPROVED SHOP DRAWINGS,



CURB DETAIL (C / B1)

MODIFIED CONDITION
TYPICAL @ 2 LOCATIONS
APPROACH SIDE AT
PIERS 1 & 4



* SEE TABLE ON BRIDGE SHEET NO. B3.

SECTION D

MODIFIED CONDITION

FILE NAME	BR_5-104W.DWG			
BRIDGE DES. ENG.	A. LELAND			
BRIDGE PROJ. ENG.	N. RODDA			
SUPERVISOR	-			
DESIGNED BY	M. BARBER			
CHECKED BY	K. HJORTESET			
ENTERED BY	P. LAVOCHIN			
PRELIM. PLAN BY	-			
ARCH. / SPEC.	-	**REVISION**	**DATE**	**BY**

REGION NO.	STATE
10	WASH

JOB NUMBER: 25x302

CONTRACT NO.

WSDOT WSP

GREGORY A. BANKS — STATE OF WASHINGTON — 45120 — PROFESSIONAL ENGINEER — CIVIL STRUCTURAL ENGINEER

6-30-2023
DATE

SEE SHEET CT1
P.E. STAMP BOX

SEE SHEET CT1
DATE
P.E. STAMP BOX

I-5
DIKE ACCESS ROAD BRIDGE
BRIDGE DECK AND EXPANSION JOINTS
I-5 OVER BNSF AND DIKE ROAD BR NO. 5/104W

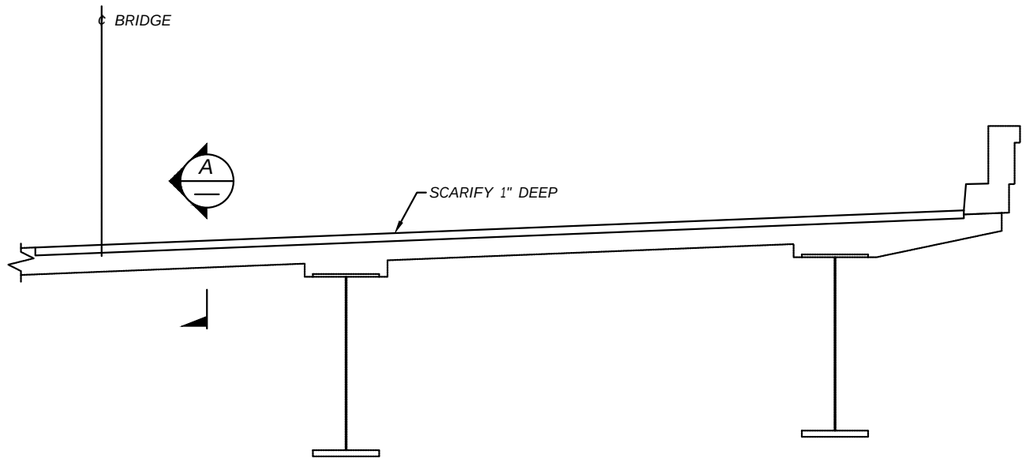
EXPANSION JOINT DETAILS 2 OF 2

PLAN REF NO: B4

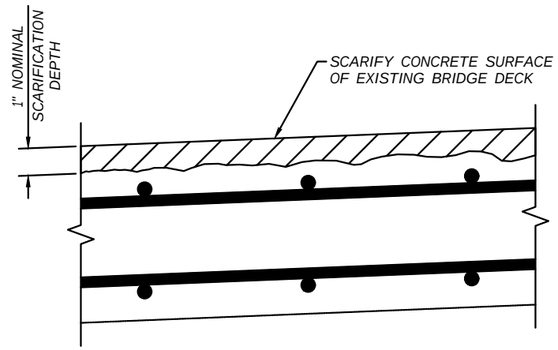
SHEET 15 OF 30 SHEETS

SR I-5 BRIDGE SHEET 22 OF 29 FILE NO. -

PLOT DATE: 6/30/23 **PLOT TIME:** 11:13 AM **PLOTTED BY:** USPL67544 **FILE PATH:** R:\USFDW100\PROJECT\2022\30902269- WSDOT BSO STAFF AUGMENTATION\30902269.001 - BRIDGE 5_104W DECK_EXPANSION\CADD\SHEETS

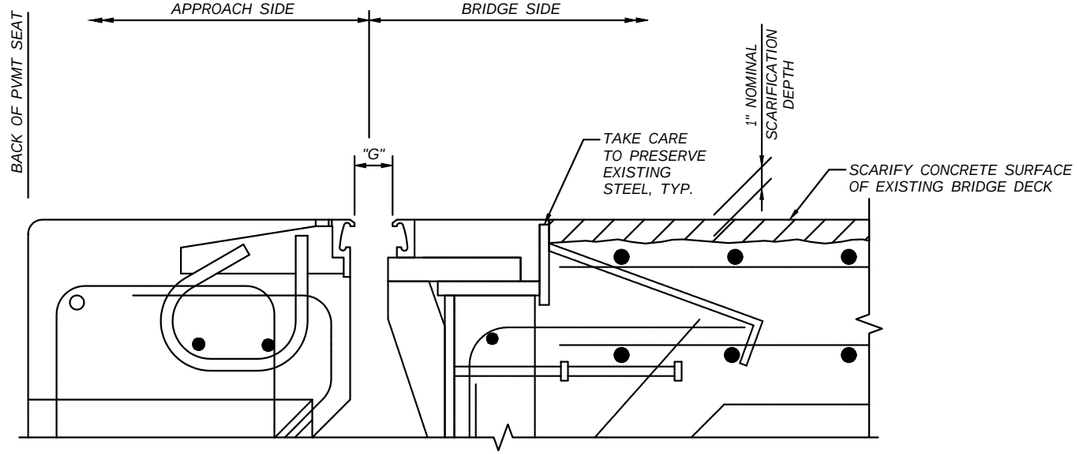


ROADWAY SECTION



SECTION A

1" TYPICAL SCARIFICATION



SECTION A

SCARIFICATION AT EXPANSION JOINTS

NOTE: MODIFIED CONCRETE OVERLAY WORK SHOWN IN THIS VIEW. SEE SHEET B3 FOR EXPANSION JOINT WORK

SR I-5 BRIDGE SHEET 23 OF 29 FILE NO. -

FILE NAME	BR_5-104W.DWG			
BRIDGE DES. ENG.	A. LELAND			
BRIDGE PROJ. ENG.	N. RODDA			
SUPERVISOR	-			
DESIGNED BY	M. BARBER			
CHECKED BY	K. HJORTESET			
ENTERED BY	P. LAVOCHIN			
PRELIM. PLAN BY	-			
ARCH. / SPEC.	-	REVISION	DATE	BY

REGION NO.	STATE
10	WASH

JOB NUMBER 25x302

CONTRACT NO.

WSDOT WSP

GREGORY A. BANKS — STATE OF WASHINGTON — 45120 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER

6-30-2023
SEE SHEET CT1 DATE
P.E. STAMP BOX

SEE SHEET CT1 DATE
P.E. STAMP BOX

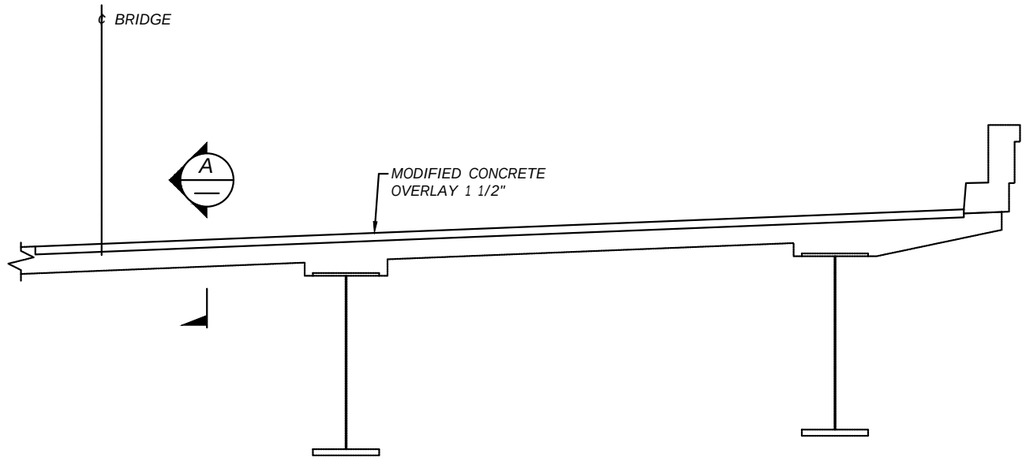
I-5
DIKE ACCESS ROAD BRIDGE
BRIDGE DECK AND EXPANSION JOINTS
I-5 OVER BNSF AND DIKE ROAD BR NO. 5/104W

OVERLAY REPLACEMENT SCARIFICATION

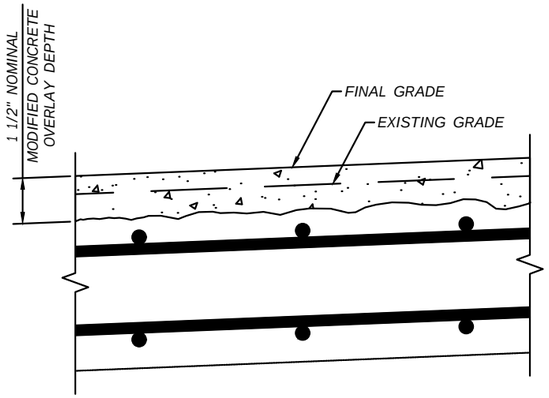
PLAN REF NO B5

SHEET 16 OF 30 SHEETS

PLOT DATE: 6/30/23 PLOT TIME: 11:13 AM PLOTTED BY: USPL67544 FILE PATH: R:\USFDW100\PROJECT\2022\30902269- WSDOT BSO STAFF AUGMENTATION\30902269.001 - BRIDGE 5_104W DECK_EXPANSION\CADD\SHEETS

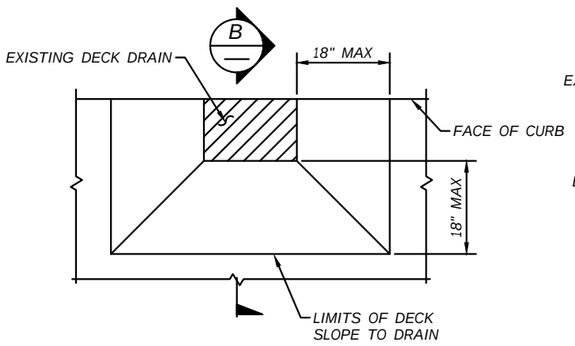


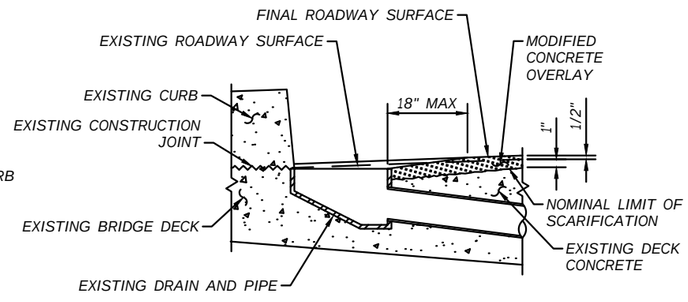
ROADWAY SECTION



SECTION A

TYPICAL MODIFIED
CONCRETE OVERLAY



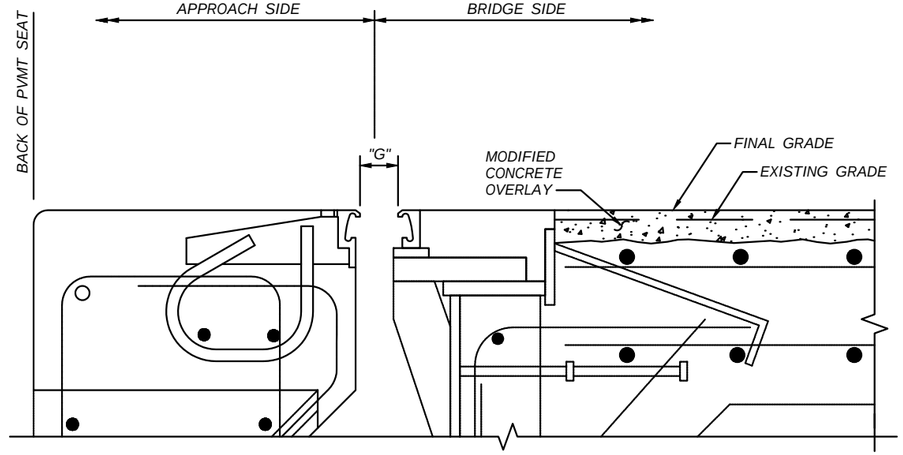


SECTION B

NTS

PLAN VIEW AT DECK DRAINS

NOTE: FINE GRADE MODIFIED CONCRETE OVERLAY WITHIN LIMITS SHOWN ADJACENT TO EXISTING DECK DRAINS.



SECTION A

MODIFIED CONCRETE
OVERLAY AT
EXPANSION JOINTS

NOTE: MODIFIED CONCRETE OVERLAY WORK SHOWN IN THIS VIEW. SEE SHEET B3 FOR EXPANSION JOINT WORK

FILE NAME	BR_5-104W.DWG			REGION NO.	STATE
BRIDGE DES. ENG.	A. LELAND			10	WASH
BRIDGE PROJ. ENG.	N. RODDA			JOB NUMBER	
SUPERVISOR	-			25x302	
DESIGNED BY	M. BARBER			CONTRACT NO.	
CHECKED BY	K. HJORTESET				
ENTERED BY	P. LAVOCHIN				
PRELIM. PLAN BY	-				
ARCH. / SPEC.	-	REVISION	DATE	BY	

WSDOT

GREGORY A. BANKS
STATE OF WASHINGTON
45120
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER
6-30-2023
SEE SHEET CT1 DATE
P.E. STAMP BOX

SEE SHEET CT1 DATE
P.E. STAMP BOX

I-5
DIKE ACCESS ROAD BRIDGE
BRIDGE DECK AND EXPANSION JOINTS
I-5 OVER BNSF AND DIKE ROAD BR NO. 5/104W

MODIFIED CONCRETE OVERLAY
INSTALLATION AND DETAILS

PLAN REF NO: B6

SHEET 17 OF 30 SHEETS

SR I-5 BRIDGE SHEET 24 OF 29 FILE NO. -

PLOT DATE: 6/30/23 PLOT TIME: 11:13 AM PLOTTED BY: USPL67544 FILE PATH: R:\USFDW100\PROJECT\2022\30902269- WSDOT BSO STAFF AUGMENTATION\30902269.001 - BRIDGE 5_104W DECK_EXPANSION\CADD\SHEETS

LEGEND

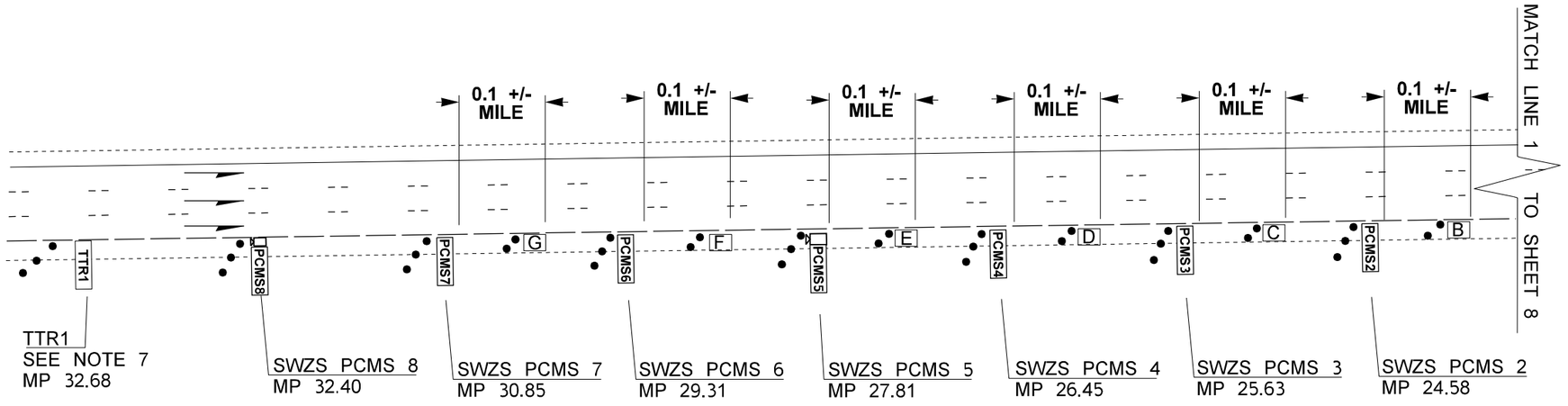
- EXISTING EDGE LINE
- EXISTING MEDIAN EDGE LINE
- EXISTING OUTSIDE EDGE LINE
- EXISTING LANE LINE
- CURB OF BRIDGE
- TEMPORARY BARRIER
- TEMPORARY LANE LINES
- GUARDRAIL
- A — TRAFFIC SENSOR
- CLASS A TRIPOD-MOUNTED SIGN LOCATION (5' MIN HEIGHT)
- PAN-TILT-ZOOM CAMERA
- PCMS1 — PORTABLE CHANGEABLE MESSAGE SIGN
- TRAFFIC SAFETY DRUM
- CLASS A SIGN LOCATION
- SMART SEQUENTIAL ARROW SIGN
- TTR1 — PORTABLE TRAVEL TIME READER
- RADAR SPEED DISPLAY SIGN (RSDS)

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50-75	40	80
45	30	60

NOTES:

1. THIS PLAN IS USED IN CONJUNCTION WITH APPLICABLE 2-LANE FREEWAY SINGLE RIGHT LANE CLOSURE TRAFFIC CONTROL PLAN (WITH PCMSs IN ADVANCE OF LANE CLOSURE TAPER REMOVED).
2. SEE SMART WORK ZONE SYSTEM (SWZS) SPECIAL PROVISION OR RFP FOR DETAILS.
3. MODIFICATIONS TO PCMS MESSAGES SHALL BE ACCEPTED BY THE ENGINEER. "##" ARE CHANGEABLE VALUES BASED ON REAL-TIME TRAVEL DELAY TIMES.
4. ADJUST SWZS COMPONENTS TO AVOID CONFLICTS WITH SEQUENTIAL ARROW SIGNS OR OTHER TRAFFIC CONTROL DEVICES, NARROW SHOULDERS, AND RAMPS.
5. LOCATE PCMSs PER STANDARD SPECIFICATION 1-10.3(3)C. PCMS MAY BE PLACED ON OPPOSITE SHOULDER BUT AVOID RAMP GORES. WHEN LOCATED BEHIND BARRIER/GUARDRAIL OR WITHIN CLOSURE, TRANSVERSE TRAFFIC DRUMS OPTIONAL.
6. MINITURE PCMS (~6' WIDE, 12+ INCH CHARACTERS) ALLOWED FOR PCMS1.
7. IN LIEU OF TRAVEL TIME READERS, ALTERNATIVE METHODS (SUCH AS USING TRAFFIC SENSOR SPEED DATA) IS ACCEPTABLE WHEN ACCURATE WITHIN 5+/- MINUTES.
8. IF SYSTEM FAILS SEE "SMART WORK ZONE SYSTEM FAILURE PROTOCOL" PROVISION.
9. IF TRAFFIC QUEUES REACH 8 MILES, PLACE ADDITIONAL PCMS AT 9.5 MILES. RELOCATE TO REMAIN 0.5+/- MILE IN ADVANCE OF QUEUE. TRUCK-MOUNTED PCMS WITH 10+ INCH CHARACTERS ACCEPTABLE. TRANSVERSE TRAFFIC SAFETY DRUMS OPTIONAL. REMOVE PCMS WHEN DISSIPATING QUEUES ARE LESS THAN 8 MILES. PCMS MESSAGE: TRAFFIC BACKUPS PRESENT / WATCH FOR SLOW TRAFFIC
10. ILLUMINATION SHALL BE INSTALLED AND OPERATIONAL PRIOR TO IMPLEMENTATION OF THE TEMPORARY BARRIER AND/OR TEMPORARY SIGNAL. THE CONTRACTOR SHALL SUBMIT A TEMPORARY LIGHTING PLAN TO THE TRAFFIC ENGINEER FOR APPROVAL PRIOR TO USE. APPROVAL OF THE TEMPORARY LIGHTING PLAN MAY TAKE UP TO 5 WORKING DAYS PER SUBMITTAL/ REVISION. ALL MATERIALS, LABOR, EQUIPMENT, ANALYSIS/ LIGHITNG PLAN, AND APPROVAL SHALL BE INCIDENTAL TO THE BID ITEM "TEMPORARY ILLUMINATION SYSTEM". CONTRACTOR SHALL REFER TO WSDOT DESIGN MANUAL CHAPTER 1040 FOR LIGHTING REQUIREMENTS. REFER TO SPECIAL PROVISION "TEMPORARY ILLUMINATION" SYSTEM FOR ADDITIONAL DETAILS.
11. DURING HOURS OF DARKNESS AND/ OR INCLEMENT WEATHER THE CONTRACTOR SHALL MAINTAIN LIGHTING LEVELS THROUGHOUT THE PROJECT. HOURS OF DARKNESS ARE DEFINED AS 1/2 HOUR PRIOR TO SUNSET AND 1/2 HOUR AFTER SUN RISE.

NOT TO SCALE



SYMBOL	TRIGGER SPEED (mph)	TRAFFIC CONDITION
FF	35+	Free Flow
SL	<35	Slowed

9-MILE SMART WORK ZONE SYSTEM FOR SB I-5/DIKE ACCESS ROAD BRIDGE (#05/104W)

QUEUE LOCATION (miles)	TRAFFIC SENSORS H	G	F	E	D	C	B	A	PCMS 8 1	PCMS 8 2	PCMS 7 1	PCMS 7 2	PCMS 6 1	PCMS 6 2	PCMS 5 1	PCMS 5 2	PCMS 4 1	PCMS 4 2	PCMS 3 1	PCMS 3 2	PCMS 2 1	PCMS 2 2	PCMS 1 1	PCMS 1 2
	TRAFFIC CONDITION								2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC
None	FF	FF	FF	FF	FF	FF	FF		■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	RIGHT LANE CLOSED	1 MILE AHEAD	■ ■ ■ ■	(Blank)
0.5 TO 1.4	FF	FF	FF	FF	FF	FF	SL		■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	SINGLE LANE CLOSURE	3 MILES AHEAD	TRAFFIC BACKUPS PRESENT	## MINUTE DELAY	SLOW OR STOPPED TRAFFIC	NEXT 1 MILE	■ ■ ■ ■	(Blank)
1.41 TO 2.4	FF	FF	FF	FF	FF	SL	SL		■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	SINGLE LANE CLOSURE	4.5 MILES AHEAD	TRAFFIC BACKUPS PRESENT	## MINUTE DELAY	SLOW OR STOPPED TRAFFIC	NEXT 2 MILES	ZIPPER MERGE AHEAD	USE RIGHT LANE TOO	ZIPPER MERGE HERE	TAKE TURNS
2.41 TO 3.4	FF	FF	FF	FF	SL	SL	SL		■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	SINGLE LANE CLOSURE	6 MILES AHEAD	TRAFFIC BACKUPS PRESENT	## MINUTE DELAY	SLOW OR STOPPED TRAFFIC	NEXT 3 MILES	2 MILES TO MERGE POINT	USE ALL 3 LANES	ZIPPER MERGE AHEAD	USE RIGHT LANE TOO	ZIPPER MERGE HERE	TAKE TURNS
3.41 TO 4.9	FF	FF	FF	SL	SL	SL	SL		■ ■ ■ ■	(Blank)	SINGLE LANE CLOSURE	7.5 MILES AHEAD	TRAFFIC BACKUPS PRESENT	## MINUTE DELAY	SLOW OR STOPPED TRAFFIC	NEXT 4.5 MILES	3 MILES TO MERGE POINT	USE ALL 3 LANES	2 MILES TO MERGE POINT	USE ALL 3 LANES	ZIPPER MERGE AHEAD	USE RIGHT LANE TOO	ZIPPER MERGE HERE	TAKE TURNS
4.91 TO 6.4	FF	FF	SL	SL	SL	SL	SL		SINGLE LANE CLOSURE	9 MILES AHEAD	TRAFFIC BACKUPS PRESENT	## MINUTE DELAY	SLOW OR STOPPED TRAFFIC	NEXT 6 MILES	4.5 MILES TO MERGE POINT	USE ALL 3 LANES	3 MILES TO MERGE POINT	USE ALL 3 LANES	2 MILES TO MERGE POINT	USE ALL 3 LANES	ZIPPER MERGE AHEAD	USE RIGHT LANE TOO	ZIPPER MERGE HERE	TAKE TURNS
6.41 TO 7.9	FF	SL	SL	SL	SL	SL	SL		1 LANE CLOSURE 9 MILES	## MINUTE DELAY	SLOW OR STOPPED TRAFFIC	NEXT 7.5 MILES	6 MILES TO MERGE POINT	USE ALL 3 LANES	4.5 MILES TO MERGE POINT	USE ALL 3 LANES	3 MILES TO MERGE POINT	USE ALL 3 LANES	2 MILES TO MERGE POINT	USE ALL 3 LANES	ZIPPER MERGE AHEAD	USE RIGHT LANE TOO	ZIPPER MERGE HERE	TAKE TURNS
7.91+	SL	SL	SL	SL	SL	SL	SL		SLOW OR STOPPED TRAFFIC	NEXT 9 MILES	1 LANE CLOSED 7.5 MILES	## MINUTE DELAY	6 MILES TO MERGE POINT	USE ALL 3 LANES	4.5 MILES TO MERGE POINT	USE ALL 3 LANES	3 MILES TO MERGE POINT	USE ALL 3 LANES	2 MILES TO MERGE POINT	USE ALL 3 LANES	ZIPPER MERGE AHEAD	USE RIGHT LANE TOO	ZIPPER MERGE HERE	TAKE TURNS

FILE NAME	G:\444304\04 - Design\02 - Design Projects\D00527K - I-5 Dike Access Road Bridge - Bridge Deck and Expansion Joints\20-CADD-Plans\20-11 PS&E Sheets\XL6568_PLAN SHEETS.dgn					
TIME	5:33:21 PM					
DATE	6/21/2023					
PLOTTED BY	MinnicN					
DESIGNED BY	N. MINNICK					
ENTERED BY						
CHECKED BY						
PROJ. ENGR.	P. REYES					
REGIONAL ADM.	C. FRANCIS	REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	0051(321)
JOB NUMBER 25x302	CONTRACT NO.	LOCATION NO. XL6568

P.E. STAMP BOX — DATE

P.E. STAMP BOX — DATE

Washington State Department of Transportation

I-5
DIKE ACCESS ROAD BRIDGE
BRIDGE DECK AND EXPANSION JOINTS

SMART WORK ZONE SYSTEM - STAGE A

Plot 1

PLAN REF NO TC1

SHEET 18 OF 30 SHEETS

LEGEND

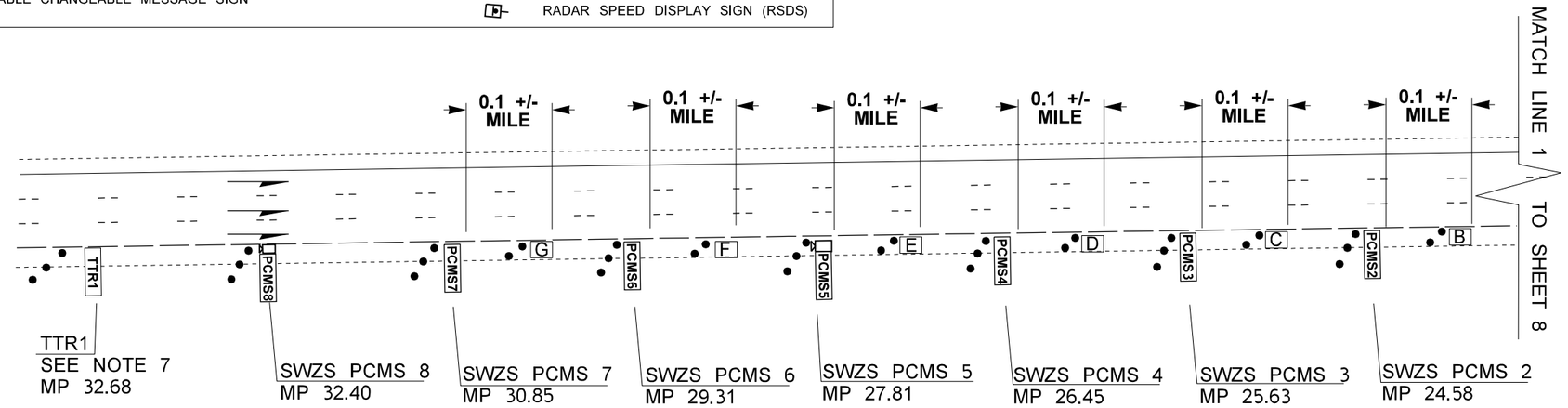
- EXISTING EDGE LINE
- EXISTING MEDIAN EDGE LINE
- EXISTING OUTSIDE EDGE LINE
- EXISTING LANE LINE
- CURB OF BRIDGE
- TEMPORARY BARRIER
- TEMPORARY LANE LINES
- GUARDRAIL
- A — TRAFFIC SENSOR
- CLASS A TRIPOD-MOUNTED SIGN LOCATION (5' MIN HEIGHT)
- PAN-TILT-ZOOM CAMERA
- PCMS1 — PORTABLE CHANGEABLE MESSAGE SIGN
- TRAFFIC SAFETY DRUM
- CLASS A SIGN LOCATION
- SMART SEQUENTIAL ARROW SIGN
- TTR1 — PORTABLE TRAVEL TIME READER
- RADAR SPEED DISPLAY SIGN (RSDS)

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50-75	40	80
45	30	60

NOTES:

1. THIS PLAN IS USED IN CONJUNCTION WITH APPLICABLE 2-LANE FREEWAY SINGLE RIGHT LANE CLOSURE TRAFFIC CONTROL PLAN (WITH PCMSs IN ADVANCE OF LANE CLOSURE TAPER REMOVED).
2. SEE SMART WORK ZONE SYSTEM (SWZS) SPECIAL PROVISION OR RFP FOR DETAILS.
3. MODIFICATIONS TO PCMS MESSAGES SHALL BE ACCEPTED BY THE ENGINEER. "##" ARE CHANGEABLE VALUES BASED ON REAL-TIME TRAVEL DELAY TIMES.
4. ADJUST SWZS COMPONENTS TO AVOID CONFLICTS WITH SEQUENTIAL ARROW SIGNS OR OTHER TRAFFIC CONTROL DEVICES, NARROW SHOULDERS, AND RAMPS.
5. LOCATE PCMSs PER STANDARD SPECIFICATION 1-10.3(3)C. PCMS MAY BE PLACED ON OPPOSITE SHOULDER BUT AVOID RAMP GORES. WHEN LOCATED BEHIND BARRIER/GUARDRAIL OR WITHIN CLOSURE, TRANSVERSE TRAFFIC DRUMS OPTIONAL.
6. MINITURE PCMS (~6' WIDE, 12+ INCH CHARACTERS) ALLOWED FOR PCMS1.
7. IN LIEU OF TRAVEL TIME READERS, ALTERNATIVE METHODS (SUCH AS USING TRAFFIC SENSOR SPEED DATA) IS ACCEPTABLE WHEN ACCURATE WITHIN 5+/- MINUTES.
8. IF SYSTEM FAILS SEE "SMART WORK ZONE SYSTEM FAILURE PROTOCOL" PROVISION.
9. IF TRAFFIC QUEUES REACH 8 MILES, PLACE ADDITIONAL PCMS AT 9.5 MILES. RELOCATE TO REMAIN 0.5+/- MILE IN ADVANCE OF QUEUE. TRUCK-MOUNTED PCMS WITH 10+ INCH CHARACTERS ACCEPTABLE. TRANSVERSE TRAFFIC SAFETY DRUMS OPTIONAL. REMOVE PCMS WHEN DISSIPATING QUEUES ARE LESS THAN 8 MILES. PCMS MESSAGE: TRAFFIC BACKUPS PRESENT / WATCH FOR SLOW TRAFFIC
10. ILLUMINATION SHALL BE INSTALLED AND OPERATIONAL PRIOR TO IMPLEMENTATION OF THE TEMPORARY BARRIER AND/OR TEMPORARY SIGNAL. THE CONTRACTOR SHALL SUBMIT A TEMPORARY LIGHTING PLAN TO THE TRAFFIC ENGINEER FOR APPROVAL PRIOR TO USE. APPROVAL OF THE TEMPORARY LIGHTING PLAN MAY TAKE UP TO 5 WORKING DAYS PER SUBMITTAL/ REVISION. ALL MATERIALS, LABOR, EQUIPMENT, ANALYSIS/ LIGHITNG PLAN, AND APPROVAL SHALL BE INCIDENTAL TO THE BID ITEM "TEMPORARY ILLUMINATION SYSTEM". CONTRACTOR SHALL REFER TO WSDOT DESIGN MANUAL CHAPTER 1040 FOR LIGHTING REQUIREMENTS. REFER TO SPECIAL PROVISION "TEMPORARY ILLUMINATION" SYSTEM FOR ADDITIONAL DETAILS.
11. DURING HOURS OF DARKNESS AND/ OR INCLEMENT WEATHER THE CONTRACTOR SHALL MAINTAIN LIGHTING LEVELS THROUGHOUT THE PROJECT. HOURS OF DARKNESS ARE DEFINED AS 1/2 HOUR PRIOR TO SUNSET AND 1/2 HOUR AFTER SUN RISE.

NOT TO SCALE



9-MILE SMART WORK ZONE SYSTEM FOR SB I-5/DIKE ACCESS ROAD BRIDGE (#05/104W)

SYMBOL	TRIGGER SPEED (mph)	TRAFFIC CONDITION
FF	35+	Free Flow
SL	<35	Slowed

QUEUE LOCATION (miles)	TRAFFIC SENSORS H	G	F	E	D	C	B	A	PCMS 8 1	PCMS 8 2	PCMS 7 1	PCMS 7 2	PCMS 6 1	PCMS 6 2	PCMS 5 1	PCMS 5 2	PCMS 4 1	PCMS 4 2	PCMS 3 1	PCMS 3 2	PCMS 2 1	PCMS 2 2	PCMS 1 1	PCMS 1 2
	TRAFFIC CONDITION								2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC	2.0 SEC
None	FF	FF	FF	FF	FF	FF	FF		■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	LEFT LANE CLOSED	1 MILE AHEAD	■ ■ ■ ■	(Blank)
0.5 TO 1.4	FF	FF	FF	FF	FF	FF	SL		■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	SINGLE LANE CLOSURE	3 MILES AHEAD	TRAFFIC BACKUPS PRESENT	## MINUTE DELAY	SLOW OR STOPPED TRAFFIC	NEXT 1 MILE	■ ■ ■ ■	(Blank)
1.41 TO 2.4	FF	FF	FF	FF	FF	SL	SL		■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	SINGLE LANE CLOSURE	4.5 MILES AHEAD	TRAFFIC BACKUPS PRESENT	## MINUTE DELAY	SLOW OR STOPPED TRAFFIC	NEXT 2 MILES	ZIPPER MERGE AHEAD	USE LEFT LANE TOO	ZIPPER MERGE HERE	TAKE TURNS
2.41 TO 3.4	FF	FF	FF	FF	SL	SL	SL		■ ■ ■ ■	(Blank)	■ ■ ■ ■	(Blank)	SINGLE LANE CLOSURE	6 MILES AHEAD	TRAFFIC BACKUPS PRESENT	## MINUTE DELAY	SLOW OR STOPPED TRAFFIC	NEXT 3 MILES	2 MILES TO MERGE POINT	USE ALL 3 LANES	ZIPPER MERGE AHEAD	USE LEFT LANE TOO	ZIPPER MERGE HERE	TAKE TURNS
3.41 TO 4.9	FF	FF	FF	SL	SL	SL	SL		■ ■ ■ ■	(Blank)	SINGLE LANE CLOSURE	7.5 MILES AHEAD	TRAFFIC BACKUPS PRESENT	## MINUTE DELAY	SLOW OR STOPPED TRAFFIC	NEXT 4.5 MILES	3 MILES TO MERGE POINT	USE ALL 3 LANES	2 MILES TO MERGE POINT	USE ALL 3 LANES	ZIPPER MERGE AHEAD	USE LEFT LANE TOO	ZIPPER MERGE HERE	TAKE TURNS
4.91 TO 6.4	FF	FF	SL	SL	SL	SL	SL		SINGLE LANE CLOSURE	9 MILES AHEAD	TRAFFIC BACKUPS PRESENT	## MINUTE DELAY	SLOW OR STOPPED TRAFFIC	NEXT 6 MILES	4.5 MILES TO MERGE POINT	USE ALL 3 LANES	3 MILES TO MERGE POINT	USE ALL 3 LANES	2 MILES TO MERGE POINT	USE ALL 3 LANES	ZIPPER MERGE AHEAD	USE LEFT LANE TOO	ZIPPER MERGE HERE	TAKE TURNS
6.41 TO 7.9	FF	SL	SL	SL	SL	SL	SL		1 LANE CLOSURE 9 MILES	## MINUTE DELAY	SLOW OR STOPPED TRAFFIC	NEXT 7.5 MILES	6 MILES TO MERGE POINT	USE ALL 3 LANES	4.5 MILES TO MERGE POINT	USE ALL 3 LANES	3 MILES TO MERGE POINT	USE ALL 3 LANES	2 MILES TO MERGE POINT	USE ALL 3 LANES	ZIPPER MERGE AHEAD	USE LEFT LANE TOO	ZIPPER MERGE HERE	TAKE TURNS
7.91+	SL	SL	SL	SL	SL	SL	SL		SLOW OR STOPPED TRAFFIC	NEXT 9 MILES	1 LANE CLOSED 7.5 MILES	## MINUTE DELAY	6 MILES TO MERGE POINT	USE ALL 3 LANES	4.5 MILES TO MERGE POINT	USE ALL 3 LANES	3 MILES TO MERGE POINT	USE ALL 3 LANES	2 MILES TO MERGE POINT	USE ALL 3 LANES	ZIPPER MERGE AHEAD	USE LEFT LANE TOO	ZIPPER MERGE HERE	TAKE TURNS

FILE NAME	G:\444304\04 - Design\02 - Design Projects\D00527K - I-5 Dike Access Road Bridge - Bridge Deck and Expansion Joints\20-CADD-Plans\20-11 PS&E Sheets\XL6568_PLAN SHEETS.dgn					
TIME	5:34:40 PM					
DATE	6/21/2023					
PLOTTED BY	MinnicN					
DESIGNED BY	N. MINNICK					
ENTERED BY						
CHECKED BY						
PROJ. ENGR.	P. REYES					
REGIONAL ADM.	C. FRANCIS	REVISION	DATE	BY		

REGION NO. 10 | STATE WASH | JOB NUMBER 25x302 | CONTRACT NO. | FED.AID PROJ.NO. 0051(321) | LOCATION NO. XL6568

P.E. STAMP BOX — DATE

P.E. STAMP BOX — DATE

Washington State Department of Transportation

I-5
DIKE ACCESS ROAD BRIDGE
BRIDGE DECK AND EXPANSION JOINTS

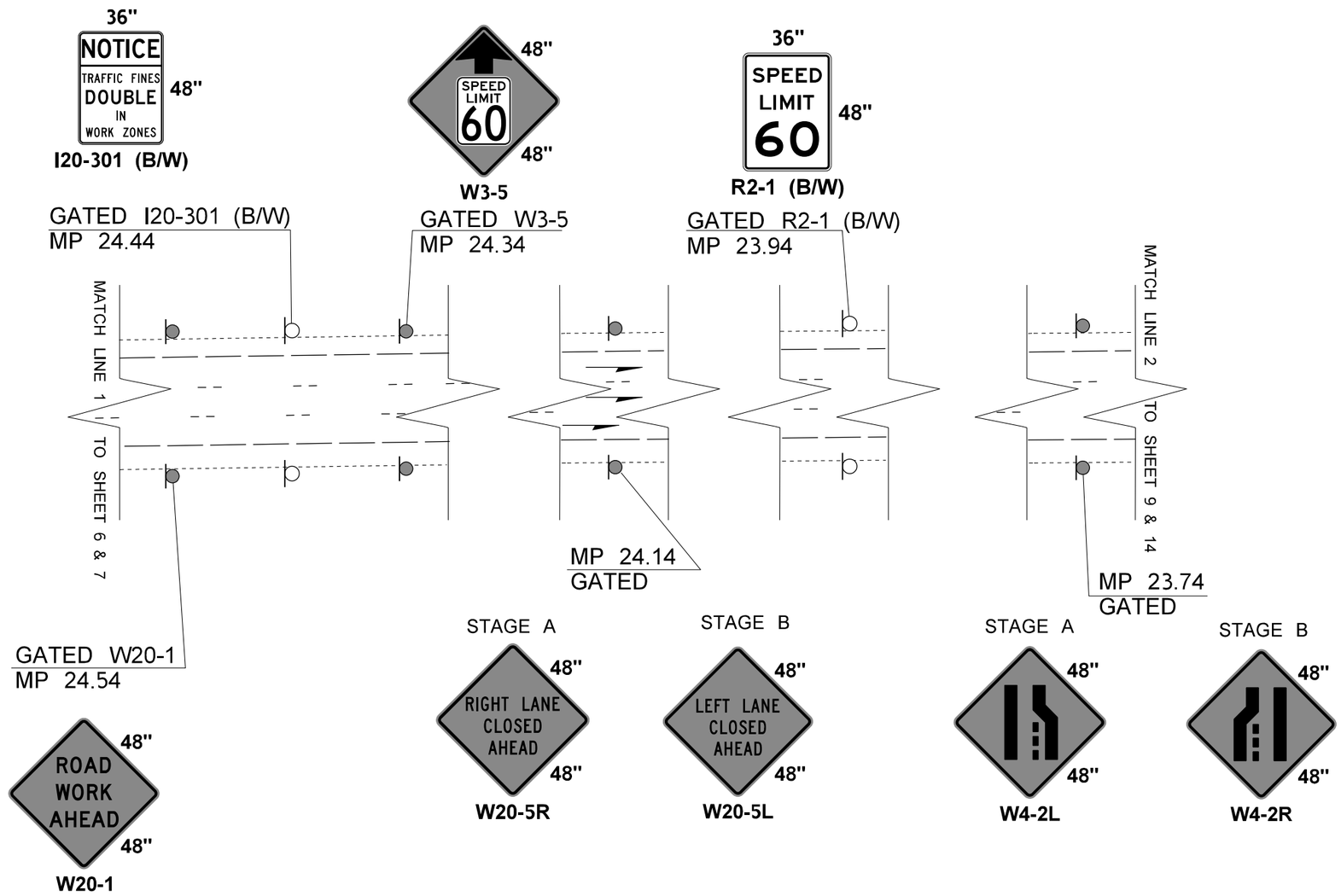
SMART WORK ZONE SYSTEM - STAGE B

Plot 11 | PLAN REF NO TC2 | SHEET 19 OF 30 SHEETS

LEGEND

- EXISTING EDGE LINE
- EXISTING MEDIAN EDGE LINE
- EXISTING OUTSIDE EDGE LINE
- EXISTING LANE LINE
- CURB OF BRIDGE
- TEMPORARY BARRIER
- TEMPORARY LANE LINES
- GUARDRAIL
- A — TRAFFIC SENSOR
- CLASS A TRIPOD-MOUNTED SIGN LOCATION (5' MIN HEIGHT)
- PAN-TILT-ZOOM CAMERA
- PCMS1 — PORTABLE CHANGEABLE MESSAGE SIGN
- TRAFFIC SAFETY DRUM
- CLASS A SIGN LOCATION
- SMART SEQUENTIAL ARROW SIGN
- TTR1 — PORTABLE TRAVEL TIME READER
- RADAR SPEED DISPLAY SIGN (RSDS)

MAXIMUM DEVICE SPACING (feet)	CHANNELIZATION	
MPH	TAPER	TANGENT
50-75	40	80
45	30	60



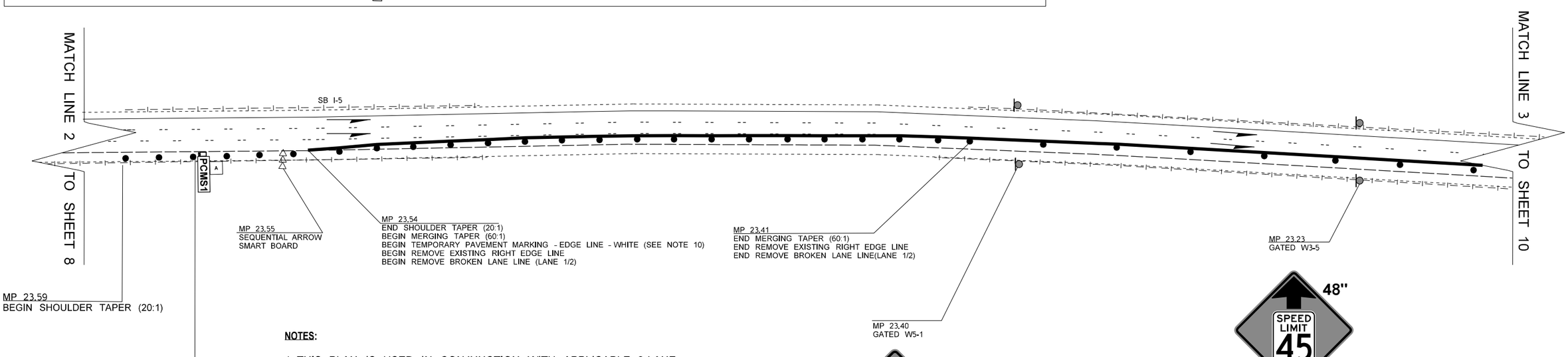
NOT TO SCALE

FILE NAME	G:\444304\04 - Design\02 - Design Projects\D00527K - I-5 Dike Access Road Bridge - Bridge Deck and Expansion Joints\20-CADD-Plans\20-11 PS&E Sheets\XL6568_PLAN SHEETS.dgn				REGION NO. 10 / STATE WASH	FED.AID PROJ.NO. 0051(321)		Washington State Department of Transportation	I-5 DIKE ACCESS ROAD BRIDGE BRIDGE DECK AND EXPANSION JOINTS
TIME	5:33:33 PM				JOB NUMBER 25x302				ADVANCED WARNING SIGNS - STAGE A & B
DATE	6/21/2023				CONTRACT NO.	LOCATION NO. XL6568			
PLOTTED BY	MinnicN								
DESIGNED BY	N.MINNICK								
ENTERED BY									
CHECKED BY									
PROJ. ENGR.	P. REYES								
REGIONAL ADM.	C. FRANCIS	REVISION	DATE	BY			DATE P.E. STAMP BOX	DATE P.E. STAMP BOX	Plot 2 / PLAN REF NO TC3 / SHEET 20 OF 30 SHEETS

LEGEND

- EXISTING EDGE LINE
- EXISTING MEDIAN EDGE LINE
- EXISTING OUTSIDE EDGE LINE
- EXISTING LANE LINE
- CURB OF BRIDGE
- TEMPORARY BARRIER
- TEMPORARY LANE LINES
- GUARDRAIL
- A — TRAFFIC SENSOR
- CLASS A TRIPOD-MOUNTED SIGN LOCATION (5' MIN HEIGHT)
- PAN-TILT-ZOOM CAMERA
- PCMS1 — PORTABLE CHANGEABLE MESSAGE SIGN
- TRAFFIC SAFETY DRUM
- CLASS A SIGN LOCATION
- SMART SEQUENTIAL ARROW SIGN
- TTR1 — PORTABLE TRAVEL TIME READER
- RADAR SPEED DISPLAY SIGN (RSDS)

MAXIMUM DEVICE SPACING (feet) CHANNELIZATION		
MPH	TAPER	TANGENT
50-75	40	80
45	30	60



NOTES:

1. THIS PLAN IS USED IN CONJUNCTION WITH APPLICABLE 2-LANE FREEWAY SINGLE RIGHT LANE CLOSURE TRAFFIC CONTROL PLAN (WITH PCMSs IN ADVANCE OF LANE CLOSURE TAPER REMOVED).
2. SEE SMART WORK ZONE SYSTEM (SWZS) SPECIAL PROVISION OR RFP FOR DETAILS.
3. MODIFICATIONS TO PCMS MESSAGES SHALL BE ACCEPTED BY THE ENGINEER. "##" ARE CHANGEABLE VALUES BASED ON REAL-TIME TRAVEL DELAY TIMES.
4. ADJUST SWZS COMPONENTS TO AVOID CONFLICTS WITH SEQUENTIAL ARROW SIGNS OR OTHER TRAFFIC CONTROL DEVICES, NARROW SHOULDERS, AND RAMPS.
5. LOCATE PCMSs PER STANDARD SPECIFICATION 1-10.3(3)C. PCMS MAY BE PLACED ON OPPOSITE SHOULDER BUT AVOID RAMP GORES. WHEN LOCATED BEHIND BARRIER/GUARDRAIL OR WITHIN CLOSURE, TRANSVERSE TRAFFIC DRUMS OPTIONAL.
6. MINITURE PCMS (~6' WIDE, 12+ INCH CHARACTERS) ALLOWED FOR PCMS1.
7. IN LIEU OF TRAVEL TIME READERS, ALTERNATIVE METHODS (SUCH AS USING TRAFFIC SENSOR SPEED DATA) IS ACCEPTABLE WHEN ACCURATE WITHIN 5+/- MINUTES.
8. IF SYSTEM FAILS SEE "SMART WORK ZONE SYSTEM FAILURE PROTOCOL" PROVISION.
9. IF TRAFFIC QUEUES REACH 8 MILES, PLACE ADDITIONAL PCMS AT 9.5 MILES. RELOCATE TO REMAIN 0.5+/- MILE IN ADVANCE OF QUEUE. TRUCK-MOUNTED PCMS WITH 10+ INCH CHARACTERS ACCEPTABLE. TRANSVERSE TRAFFIC SAFETY DRUMS OPTIONAL. REMOVE PCMS WHEN DISSIPATING QUEUES ARE LESS THAN 8 MILES. PCMS MESSAGE: TRAFFIC BACKUPS PRESENT / WATCH FOR SLOW TRAFFIC
10. TEMPORARY PAVEMENT MARKINGS SHALL BE ONE COAT OF PAINT WITH GLASS BEADS. TEMPORARY TAPE NOT ALLOWED FOR TEMPORARY MARKINGS

NOT TO SCALE

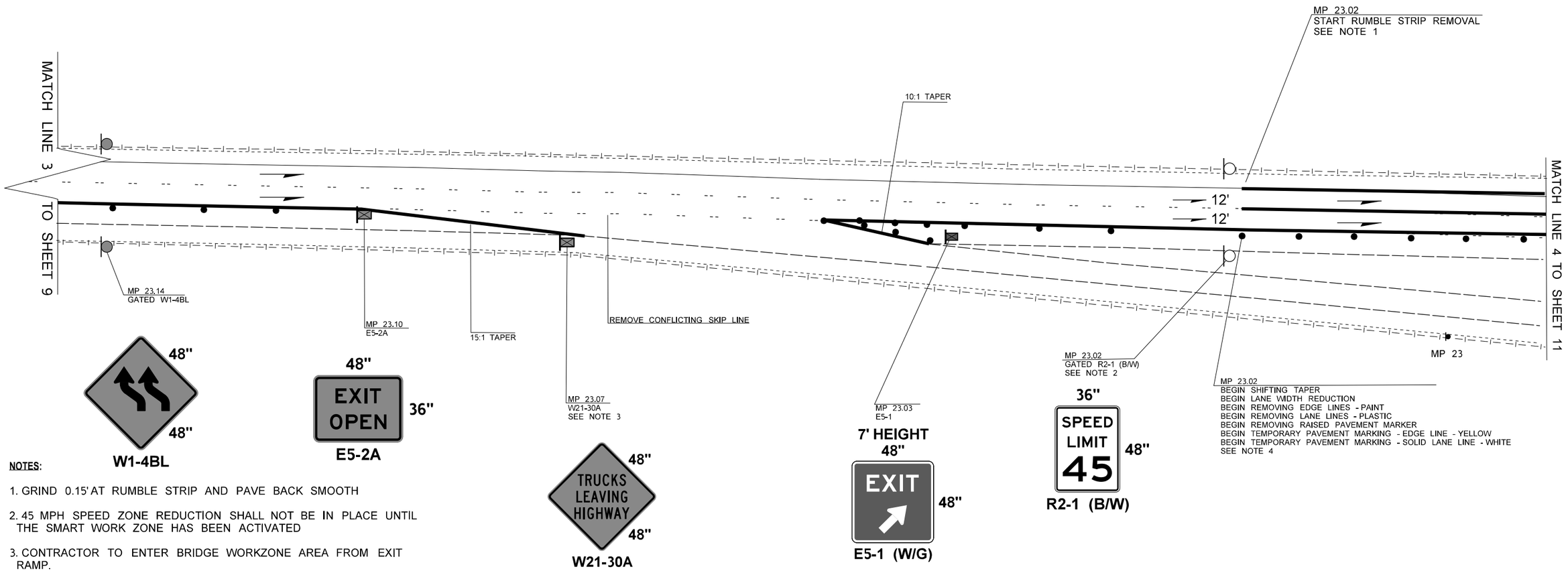
FILE NAME	G:\444304\04 - Design\02 - Design Projects\D00527K - I-5 Dike Access Road Bridge - Bridge Deck and Expansion Joints\20-CADD-Plans\20-11 PS&E Sheets\XL6568_PLAN SHEETS.dgn				REGION NO. / STATE	FED.AID PROJ.NO.		Plot 3
TIME	5:33:48 PM				10 / WASH	0051(321)	Washington State Department of Transportation	PLAN REF NO SA1
DATE	6/21/2023				JOB NUMBER 25x302		I-5 DIKE ACCESS ROAD BRIDGE BRIDGE DECK AND EXPANSION JOINTS	
PLOTTED BY	MinnicN				CONTRACT NO.	LOCATION NO. XL6568		SHEET 21 OF 30 SHEETS
DESIGNED BY	N. MINNICK							
ENTERED BY								
CHECKED BY								
PROJ. ENGR.	P. REYES							
REGIONAL ADM.	C. FRANCIS	REVISION	DATE	BY			STAGING PLANS - STAGE A	

P.E. STAMP BOX — DATE — P.E. STAMP BOX — DATE

LEGEND

- EXISTING EDGE LINE
- EXISTING MEDIAN EDGE LINE
- EXISTING OUTSIDE EDGE LINE
- EXISTING LANE LINE
- CURB OF BRIDGE
- TEMPORARY BARRIER
- TEMPORARY LANE LINES
- GUARDRAIL
- A — TRAFFIC SENSOR
- CLASS A TRIPOD-MOUNTED SIGN LOCATION (5'MIN HEIGHT)
- PAN-TILT-ZOOM CAMERA
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- TRAFFIC SAFETY DRUM
- CLASS A SIGN LOCATION
- SMART SEQUENTIAL ARROW SIGN
- TTR1 — PORTABLE TRAVEL TIME READER
- RADAR SPEED DISPLAY SIGN (RSDS)

MAXIMUM DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50-75	40	80
45	30	60



W1-4BL

E5-2A

W21-30A

E5-1 (W/G)

R2-1 (B/W)

NOTES:

1. GRIND 0.15' AT RUMBLE STRIP AND PAVE BACK SMOOTH
2. 45 MPH SPEED ZONE REDUCTION SHALL NOT BE IN PLACE UNTIL THE SMART WORK ZONE HAS BEEN ACTIVATED
3. CONTRACTOR TO ENTER BRIDGE WORKZONE AREA FROM EXIT RAMP.
4. TEMPORARY PAVEMENT MARKINGS SHALL BE ONE COAT OF PAINT WITH GLASS BEADS. TEMPORARY TAPE NOT ALLOWED FOR TEMPORARY MARKINGS

NOT TO SCALE

FILE NAME	G:\444304\04 - Design\02 - Design Projects\D00527K - I-5 Dike Access Road Bridge - Bridge Deck and Expansion Joints\20-CADD-Plans\20-11 PS&E Sheets\XL6568_PLAN SHEETS.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. 0051(321)	Plot 4	
TIME	5:34:03 PM				JOB NUMBER 25x302			PLAN REF NO SA2	
DATE	6/21/2023				CONTRACT NO.		LOCATION NO. XL6568	SHEET 22 OF 30 SHEETS	
PLOTTED BY	MinnicN								
DESIGNED BY	N. MINNICK								
ENTERED BY									
CHECKED BY									
PROJ. ENGR.	P. REYES								
REGIONAL ADM.	C. FRANCIS	REVISION	DATE	BY					

P.E. STAMP BOX — DATE

P.E. STAMP BOX — DATE

Washington State Department of Transportation

I-5
DIKE ACCESS ROAD BRIDGE
BRIDGE DECK AND EXPANSION JOINTS

STAGING PLANS - STAGE A

LEGEND

- EXISTING EDGE LINE
- EXISTING MEDIAN EDGE LINE
- EXISTING OUTSIDE EDGE LINE
- EXISTING LANE LINE
- CURB OF BRIDGE
- TEMPORARY BARRIER
- TEMPORARY LANE LINES
- GUARDRAIL
- A — TRAFFIC SENSOR
- CLASS A TRIPOD-MOUNTED SIGN LOCATION (5' MIN HEIGHT)
- PAN-TILT-ZOOM CAMERA
- PCMS7 — PORTABLE CHANGEABLE MESSAGE SIGN
- TRAFFIC SAFETY DRUM
- CLASS A SIGN LOCATION
- SMART SEQUENTIAL ARROW SIGN
- TTR1 — PORTABLE TRAVEL TIME READER
- RADAR SPEED DISPLAY SIGN (RSDS)

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50-75	40	80
45	30	60

TL-2 APPROVED TEMPORARY IMPACT ATTENUATOR LIST	
ASBORB 350 (5+ ELEMENTS)	QUEST
SLED (3+ MODULES)	QUADGUARD (3+ BAY)
ACZ-350 (2+ SECTIONS)	N-E-A-T
TRITON CET (6 SECTIONS)	ShorTRACC
TRACC	ADIEM 350
TL-2 ATTENUATORS ONLY APPROVED FOR SPEEDS 45 MPH OR LESS.	

MP 22.90
R2-1 (B/W) & RADAR FEEDBACK SIGN (28' RT)

MATCH LINE 4 TO SHEET 10

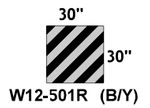
MATCH LINE 5 TO SHEET 12

10.5'
10.5'

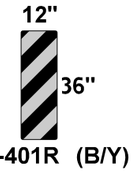
10' MIN. CONSTRUCTION ACCESS WIDTH
R11-204

MP 22.90
BEGIN TEMPORARY BARRIER (15:1 FLARE RATE)
SEE STD. PLN. M-40.10
SEE NOTE 1

TEMPORARY IMPACT ATTENUATOR
W12-501R



MP 22.86
BARRIER ANGLE POINT
& W12-401R



MP 22.95
END SHIFTING TAPER

- A — LINE A SHIFTED 6.20' LEFT
- B — LINE B SHIFTED 7.35' LEFT
- C — LINE C SHIFTED 9' LEFT

NOTES:

1. TEMPORARY ILLUMINATION SYSTEM SHALL BE INSTALLED AND OPERATIONAL PRIOR TO TEMPORARY BARRIER INSTALLATION. ILLUMINATION SYSTEM SHOULD BE REMOVED ONCE TEMPORARY BARIER IS NO LONGER NEEDED. REFER TO SPECIAL PROVISION TEMPORARY ILLUMINATION SYSTEM FOR ADDITIONAL DETAILS.

NOT TO SCALE

FILE NAME	G:\444304\04 - Design\02 - Design Projects\D00527K - I-5 Dike Access Road Bridge - Bridge Deck and Expansion Joints\20-CADD-Plans\20-11 PS&E Sheets\XL6568_PLAN SHEETS.dgn								Plot 5
TIME	5:34:12 PM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. 0051(321)	Washington State Department of Transportation	I-5 DIKE ACCESS ROAD BRIDGE BRIDGE DECK AND EXPANSION JOINTS	PLAN REF NO SA3
DATE	6/21/2023									
PLOTTED BY	MinnicN									
DESIGNED BY	N. MINNICK				JOB NUMBER 25x302					
ENTERED BY										
CHECKED BY					CONTRACT NO.		LOCATION NO. XL6568		STAGING PLANS - STAGE A	SHEET 23 OF 30 SHEETS
PROJ. ENGR.	P. REYES									
REGIONAL ADM.	C. FRANCIS	REVISION	DATE	BY						

DATE — P.E. STAMP BOX

DATE — P.E. STAMP BOX

LEGEND

- EXISTING EDGE LINE
- EXISTING MEDIAN EDGE LINE
- EXISTING OUTSIDE EDGE LINE
- EXISTING LANE LINE
- CURB OF BRIDGE
- TEMPORARY BARRIER
- TEMPORARY LANE LINES
- GUARDRAIL
- A — TRAFFIC SENSOR
- CLASS A TRIPOD-MOUNTED SIGN LOCATION (5' MIN HEIGHT)
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- PCMS1 — PORTABLE CHANGEABLE MESSAGE SIGN
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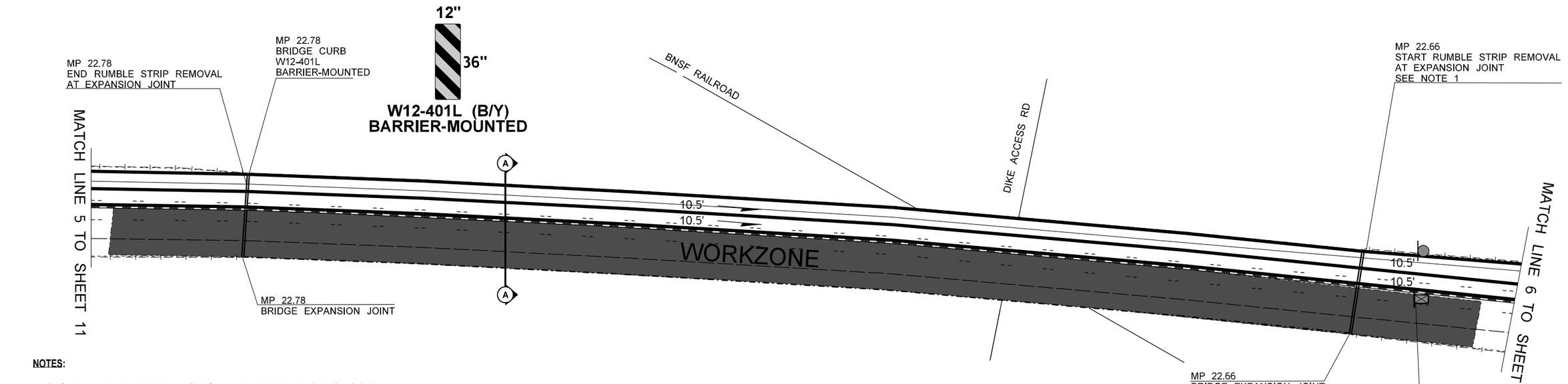
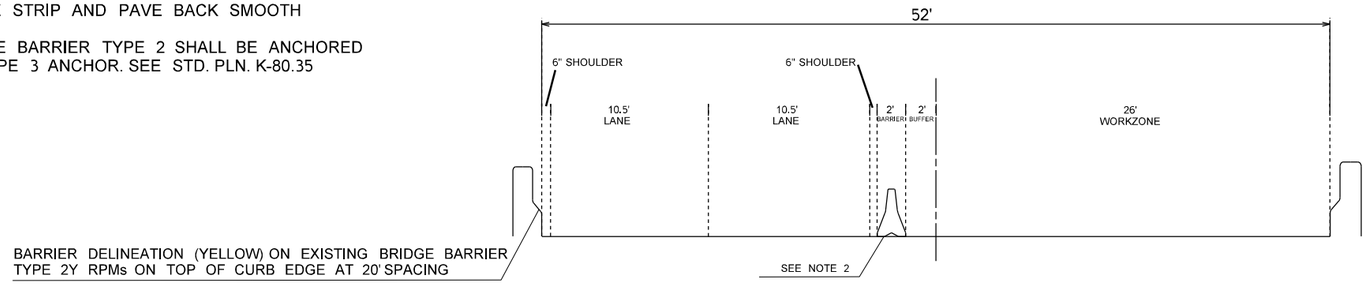
- CLASS A SIGN LOCATION
- SMART SEQUENTIAL ARROW SIGN
- TTR1 — PORTABLE TRAVEL TIME READER
- RADAR SPEED DISPLAY SIGN (RSDS)

MAXIMUM DEVICE SPACING (feet) CHANNELIZATION		
MPH	TAPER	TANGENT
50-75	40	80
45	30	60



NOTES:

1. GRIND 0.15' AT RUMBLE STRIP AND PAVE BACK SMOOTH
2. TEMPORARY CONCRETE BARRIER TYPE 2 SHALL BE ANCHORED WITH A TYPE 1 OR TYPE 3 ANCHOR. SEE STD. PLN. K-80.35



WORKZONE SECTION A

NOT TO SCALE

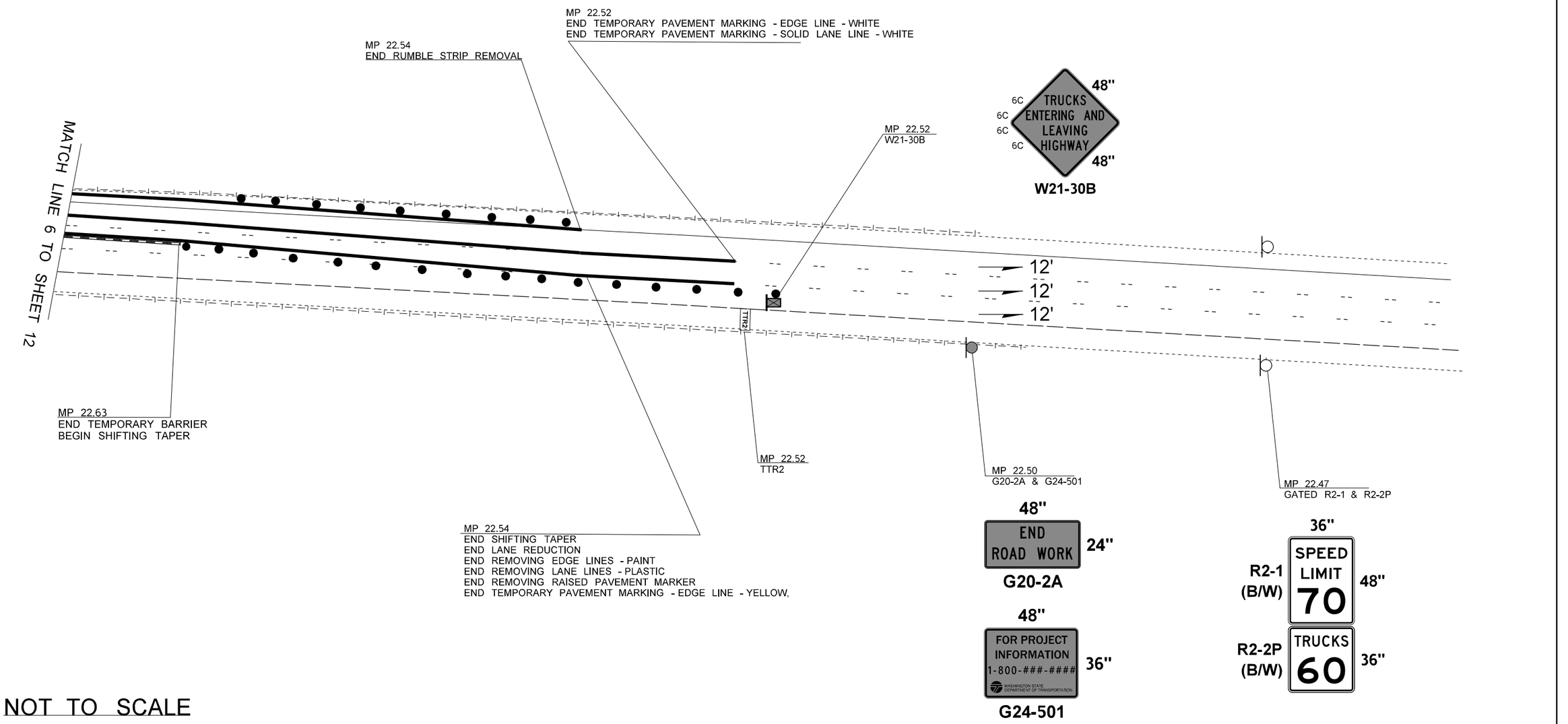
FILE NAME	G:\444304\04 - Design\02 - Design Projects\D00527K - I-5 Dike Access Road Bridge - Bridge Deck and Expansion Joints\20-CADD-Plans\20-11 PS&E Sheets\XL6568_PLAN SHEETS.dgn				REGION NO. / STATE	FED.AID PROJ.NO.		Plot 6
TIME	5:34:23 PM				10 WASH	0051(321)	Washington State Department of Transportation	PLAN REF NO SA4
DATE	6/21/2023				JOB NUMBER 25x302		I-5 DIKE ACCESS ROAD BRIDGE BRIDGE DECK AND EXPANSION JOINTS	SHEET 24 OF 30 SHEETS
PLOTTED BY	MinnicN				CONTRACT NO.	LOCATION NO. XL6568	STAGING PLANS - STAGE A	
DESIGNED BY	N. MINNICK							
ENTERED BY								
CHECKED BY								
PROJ. ENGR.	P. REYES							
REGIONAL ADM.	C. FRANCIS	REVISION	DATE	BY				

P.E. STAMP BOX — DATE — P.E. STAMP BOX — DATE

LEGEND

- EXISTING EDGE LINE
- EXISTING MEDIAN EDGE LINE
- EXISTING OUTSIDE EDGE LINE
- EXISTING LANE LINE
- CURB OF BRIDGE
- TEMPORARY BARRIER
- TEMPORARY LANE LINES
- GUARDRAIL
- A — TRAFFIC SENSOR
- CLASS A TRIPOD-MOUNTED SIGN LOCATION (5' MIN HEIGHT)
- PAN-TILT-ZOOM CAMERA
- PCMS1 — PORTABLE CHANGEABLE MESSAGE SIGN
- TRAFFIC SAFETY DRUM
- CLASS A SIGN LOCATION
- SMART SEQUENTIAL ARROW SIGN
- TTR1 — PORTABLE TRAVEL TIME READER
- RADAR SPEED DISPLAY SIGN (RSDS)

MAXIMUM DEVICE SPACING (feet) CHANNELIZATION		
MPH	TAPER	TANGENT
50-75	40	80
45	30	60



NOT TO SCALE

FILE NAME	G:\444304\04 - Design\02 - Design Projects\D00527K - I-5 Dike Access Road Bridge - Bridge Deck and Expansion Joints\20-CADD-Plans\20-11 PS&E Sheets\XL6568_PLAN SHEETS.dgn				REGION NO. / STATE	FED.AID PROJ.NO.			Plot 7
TIME	5:34:32 PM				10 / WASH	0051(321)			PLAN REF NO SA5
DATE	6/21/2023				JOB NUMBER 25x302				
PLOTTED BY	MinnicN				CONTRACT NO.	LOCATION NO.			SHEET 25 OF 30 SHEETS
DESIGNED BY	N. MINNICK					XL6568			
ENTERED BY									
CHECKED BY									
PROJ. ENGR.	P. REYES								
REGIONAL ADM.	C. FRANCIS	REVISION	DATE	BY					

P.E. STAMP BOX — DATE

P.E. STAMP BOX — DATE

Washington State Department of Transportation

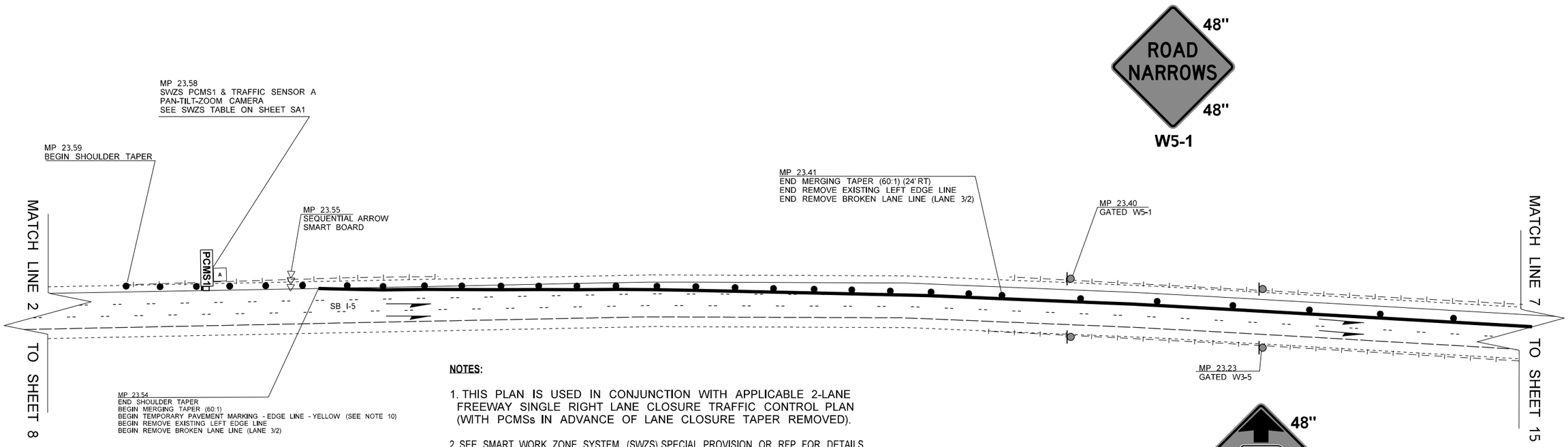
I-5
DIKE ACCESS ROAD BRIDGE
BRIDGE DECK AND EXPANSION JOINTS

STAGING PLANS - STAGE A

LEGEND

- EXISTING EDGE LINE
- EXISTING MEDIAN EDGE LINE
- EXISTING OUTSIDE EDGE LINE
- EXISTING LANE LINE
- CURB OF BRIDGE
- TEMPORARY BARRIER
- TEMPORARY LANE LINES
- GUARDRAIL
- A — TRAFFIC SENSOR
- CLASS A TRIPOD-MOUNTED SIGN LOCATION (5' MIN HEIGHT)
- PAN-TILT-ZOOM CAMERA
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- TRAFFIC SAFETY DRUM
- CLASS A SIGN LOCATION
- SMART SEQUENTIAL ARROW SIGN
- TTR1 — PORTABLE TRAVEL TIME READER
- RADAR SPEED DISPLAY SIGN (RSDS)

MAXIMUM DEVICE SPACING (feet)	CHANNELIZATION	
MPH	TAPER	TANGENT
50-75	40	80
45	30	60



W5-1

W3-5

NOT TO SCALE

NOTES:

1. THIS PLAN IS USED IN CONJUNCTION WITH APPLICABLE 2-LANE FREEWAY SINGLE RIGHT LANE CLOSURE TRAFFIC CONTROL PLAN (WITH PCMSs IN ADVANCE OF LANE CLOSURE TAPER REMOVED).
2. SEE SMART WORK ZONE SYSTEM (SWZS) SPECIAL PROVISION OR RFP FOR DETAILS.
3. MODIFICATIONS TO PCMS MESSAGES SHALL BE ACCEPTED BY THE ENGINEER. "##" ARE CHANGEABLE VALUES BASED ON REAL-TIME TRAVEL DELAY TIMES.
4. ADJUST SWZS COMPONENTS TO AVOID CONFLICTS WITH SEQUENTIAL ARROW SIGNS OR OTHER TRAFFIC CONTROL DEVICES, NARROW SHOULDERS, AND RAMPS.
5. LOCATE PCMSs PER STANDARD SPECIFICATION 1-10.3(3)C. PCMS MAY BE PLACED ON OPPOSITE SHOULDER BUT AVOID RAMP GORES. WHEN LOCATED BEHIND BARRIER/GUARDRAIL OR WITHIN CLOSURE, TRANSVERSE TRAFFIC DRUMS OPTIONAL.
6. MINITURE PCMS (~6' WIDE, 12+ INCH CHARACTERS) ALLOWED FOR PCMS1.
7. IN LIEU OF TRAVEL TIME READERS, ALTERNATIVE METHODS (SUCH AS USING TRAFFIC SENSOR SPEED DATA) IS ACCEPTABLE WHEN ACCURATE WITHIN 5+/- MINUTES.
8. IF SYSTEM FAILS SEE "SMART WORK ZONE SYSTEM FAILURE PROTOCOL" PROVISION.
9. IF TRAFFIC QUEUES REACH 8 MILES, PLACE ADDITIONAL PCMS AT 9.5 MILES. RELOCATE TO REMAIN 0.5+/- MILE IN ADVANCE OF QUEUE. TRUCK-MOUNTED PCMS WITH 10+ INCH CHARACTERS ACCEPTABLE. TRANSVERSE TRAFFIC SAFETY DRUMS OPTIONAL. REMOVE PCMS WHEN DISSIPATING QUEUES ARE LESS THAN 8 MILES. PCMS MESSAGE: TRAFFIC BACKUPS PRESENT / WATCH FOR SLOW TRAFFIC
10. TEMPORARY PAVEMENT MARKINGS SHALL BE ONE COAT OF PAINT WITH GLASS BEADS. TEMPORARY TAPE NOT ALLOWED FOR TEMPORARY MARKINGS

FILE NAME	G:\444304\04 - Design\02 - Design Projects\D00527K - I-5 Dike Access Road Bridge - Bridge Deck and Expansion Joints\20-CADD-Plans\20-11 PS&E Sheets\XL6568_PLAN SHEETS.dgn			
TIME	5:34:49 PM			
DATE	6/21/2023			
PLOTTED BY	MinnicN			
DESIGNED BY	N. MINNICK			
ENTERED BY				
CHECKED BY				
PROJ. ENGR.	P. REYES			
REGIONAL ADM.	C. FRANCIS	REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	0051(321)
JOB NUMBER 25x302		
CONTRACT NO.		LOCATION NO. XL6568

P.E. STAMP BOX — DATE

P.E. STAMP BOX — DATE

Washington State Department of Transportation

I-5
DIKE ACCESS ROAD BRIDGE
BRIDGE DECK AND EXPANSION JOINTS

STAGING PLANS - STAGE B

Plot 12

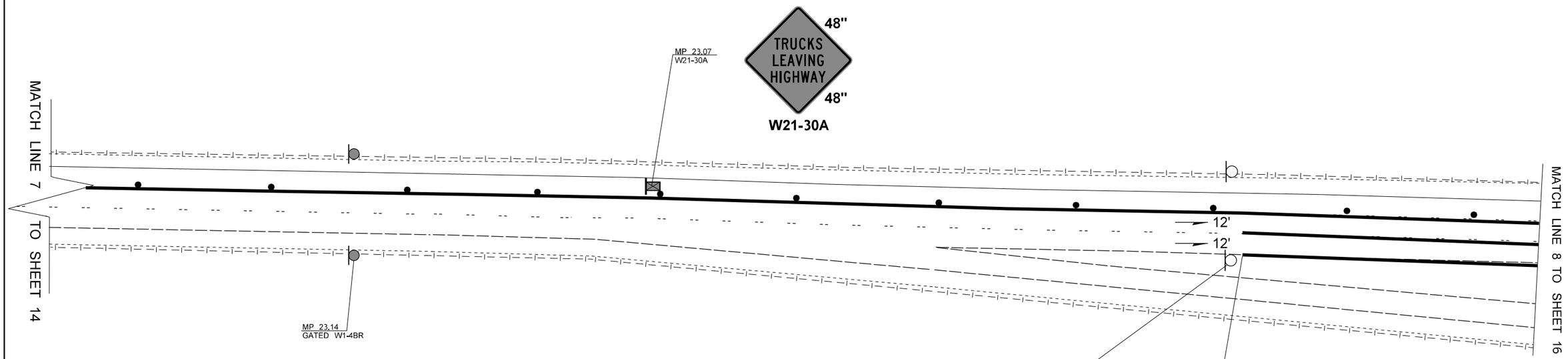
PLAN REF NO SB1

SHEET 26 OF 30 SHEETS

LEGEND

- EXISTING EDGE LINE
- EXISTING MEDIAN EDGE LINE
- EXISTING OUTSIDE EDGE LINE
- EXISTING LANE LINE
- CURB OF BRIDGE
- TEMPORARY BARRIER
- TEMPORARY LANE LINES
- GUARDRAIL
- A — TRAFFIC SENSOR
- CLASS A TRIPOD-MOUNTED SIGN LOCATION (5' MIN HEIGHT)
- PAN-TILT-ZOOM CAMERA
- PCMS1 — PORTABLE CHANGEABLE MESSAGE SIGN
- TRAFFIC SAFETY DRUM
- CLASS A SIGN LOCATION
- SMART SEQUENTIAL ARROW SIGN
- TTR1 — PORTABLE TRAVEL TIME READER
- RADAR SPEED DISPLAY SIGN (RSDS)

MAXIMUM DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50-75	40	80
45	30	60



48"
48"
W1-4BR

36"
SPEED LIMIT 45
48"
R2-1 (B/W)

NOTES:

1. TEMPORARY PAVEMENT MARKINGS SHALL BE ONE COAT OF PAINT WITH GLASS BEADS. TEMPORARY TAPE NOT ALLOWED FOR TEMPORARY MARKINGS

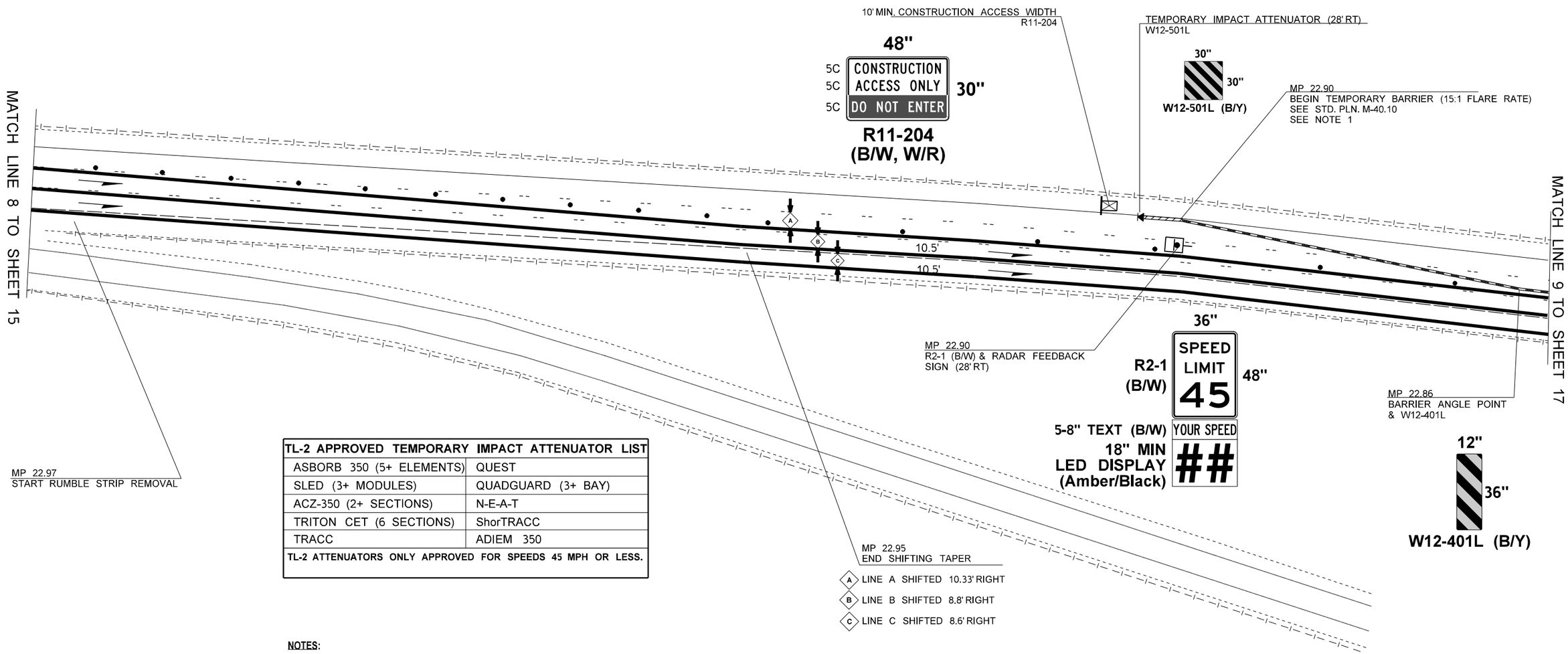
NOT TO SCALE

FILE NAME	G:\444304\04 - Design\02 - Design Projects\D00527K - I-5 Dike Access Road Bridge - Bridge Deck and Expansion Joints\20-CADD-Plans\20-11 PS&E Sheets\XL6568_PLAN SHEETS.dgn							Plot 13
TIME	5:34:59 PM				REGION NO. 10 / STATE WASH	FED.AID PROJ.NO. 0051(321)	Washington State Department of Transportation	I-5 DIKE ACCESS ROAD BRIDGE BRIDGE DECK AND EXPANSION JOINTS	PLAN REF NO SB2
DATE	6/21/2023								
PLOTTED BY	MinnicN				JOB NUMBER 25x302				SHEET 27 OF 30 SHEETS
DESIGNED BY	N. MINNICK								
ENTERED BY					CONTRACT NO.	LOCATION NO. XL6568		STAGING PLANS - STAGE B	
CHECKED BY									
PROJ. ENGR.	P. REYES								
REGIONAL ADM.	C. FRANCIS	REVISION	DATE	BY			P.E. STAMP BOX / DATE	P.E. STAMP BOX / DATE	

LEGEND

- EXISTING EDGE LINE
- EXISTING MEDIAN EDGE LINE
- EXISTING OUTSIDE EDGE LINE
- EXISTING LANE LINE
- CURB OF BRIDGE
- TEMPORARY BARRIER
- TEMPORARY LANE LINES
- GUARDRAIL
- A — TRAFFIC SENSOR
- CLASS A TRIPOD-MOUNTED SIGN LOCATION (5' MIN HEIGHT)
- PAN-TILT-ZOOM CAMERA
- PCMS1 — PORTABLE CHANGEABLE MESSAGE SIGN
- TRAFFIC SAFETY DRUM
- CLASS A SIGN LOCATION
- SMART SEQUENTIAL ARROW SIGN
- TTR1 — PORTABLE TRAVEL TIME READER
- RADAR SPEED DISPLAY SIGN (RSDS)

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50-75	40	80
45	30	60



TL-2 APPROVED TEMPORARY IMPACT ATTENUATOR LIST	
ASBORB 350 (5+ ELEMENTS)	QUEST
SLED (3+ MODULES)	QUADGUARD (3+ BAY)
ACZ-350 (2+ SECTIONS)	N-E-A-T
TRITON CET (6 SECTIONS)	ShorTRACC
TRACC	ADIEM 350
TL-2 ATTENUATORS ONLY APPROVED FOR SPEEDS 45 MPH OR LESS.	

NOTES:

1. TEMPORARY ILLUMINATION SYSTEM SHALL BE INSTALLED AND OPERATIONAL PRIOR TO TEMPORARY BARRIER INSTALLATION. ILLUMINATION SYSTEM SHOULD BE REMOVED ONCE TEMPORARY BARIER IS NO LONGER NEEDED. REFER TO SPECIAL PROVISION TEMPORARY ILLUMINATION SYSTEM FOR ADDITIONAL DETAILS.

NOT TO SCALE

FILE NAME	G:\444304\04 - Design\02 - Design Projects\D00527K - I-5 Dike Access Road Bridge - Bridge Deck and Expansion Joints\20-CADD-Plans\20-11 PS&E Sheets\XL6568_PLAN SHEETS.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. 0051(321)
TIME	5:35:08 PM						
DATE	6/21/2023				JOB NUMBER 25x302		
PLOTTED BY	MinnicN						
DESIGNED BY	N. MINNICK				CONTRACT NO.		LOCATION NO. XL6568
ENTERED BY							
CHECKED BY							
PROJ. ENGR.	P. REYES						
REGIONAL ADM.	C. FRANCIS	REVISION	DATE	BY			

P.E. STAMP BOX — DATE

P.E. STAMP BOX — DATE

Washington State Department of Transportation

I-5
DIKE ACCESS ROAD BRIDGE
BRIDGE DECK AND EXPANSION JOINTS

STAGING PLANS - STAGE B

PLAN REF NO SB3

SHEET 28 OF 30 SHEETS

LEGEND

- EXISTING EDGE LINE
- EXISTING MEDIAN EDGE LINE
- EXISTING OUTSIDE EDGE LINE
- EXISTING LANE LINE
- CURB OF BRIDGE
- TEMPORARY BARRIER
- TEMPORARY LANE LINES
- GUARDRAIL
- A — TRAFFIC SENSOR
- CLASS A TRIPOD-MOUNTED SIGN LOCATION (5' MIN HEIGHT)
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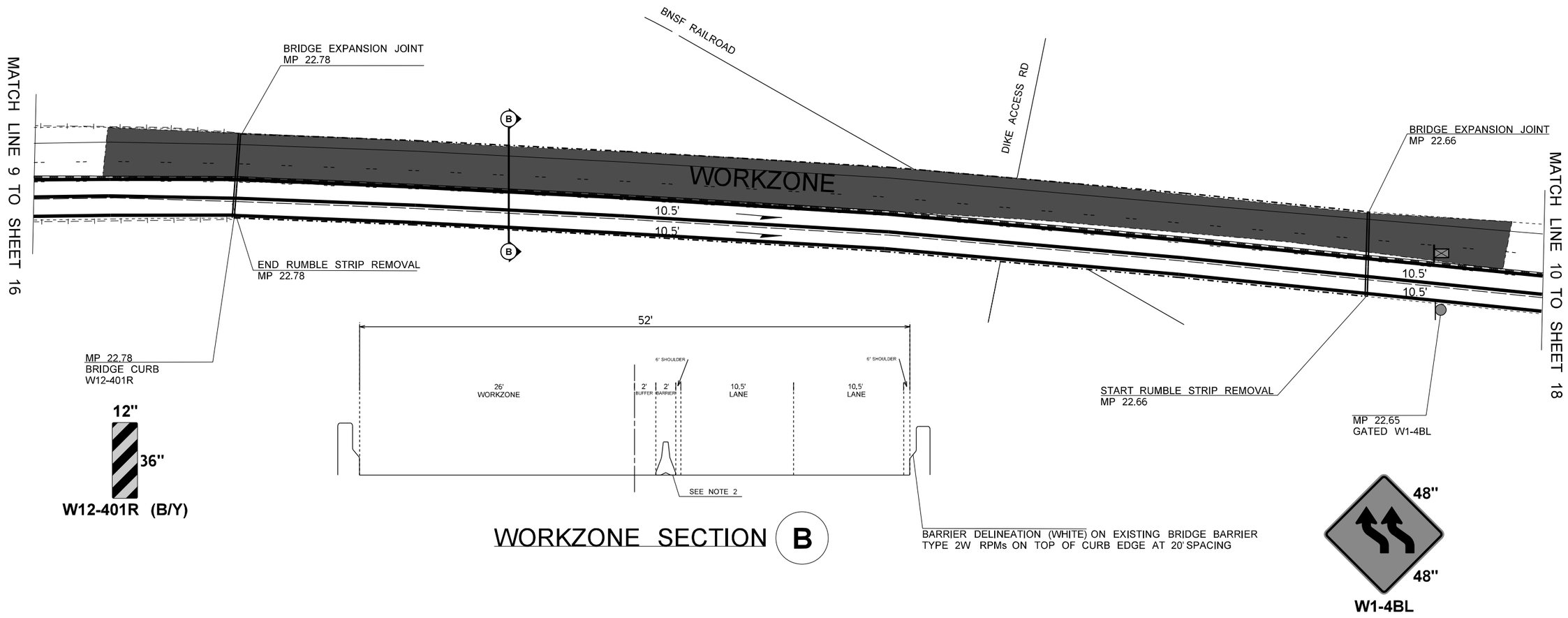
- PCMS1 — PORTABLE CHANGEABLE MESSAGE SIGN
- TRAFFIC SAFETY DRUM
- CLASS A SIGN LOCATION
- SMART SEQUENTIAL ARROW SIGN
- TTR1 — PORTABLE TRAVEL TIME READER
- RADAR SPEED DISPLAY SIGN (RSDS)

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50-75	40	80
45	30	60



WORKZONE SECTION B

NOT TO SCALE

NOTES:

1. GRIND 0.15' AT RUMBLE STRIP AND PAVE BACK SMOOTH
2. TEMPORARY CONCRETE BARRIER TYPE 2 SHALL BE ANCHORED WITH A TYPE 1 OR TYPE 3 ANCHOR. SEE STD. PLN. K-80.35

FILE NAME	G:\444304\04 - Design\02 - Design Projects\D00527K - I-5 Dike Access Road Bridge - Bridge Deck and Expansion Joints\20-CADD-Plans\20-11 PS&E Sheets\XL6568_PLAN SHEETS.dgn				REGION NO. 10 / STATE WASH	FED.AID PROJ.NO. 0051(321)			PLAN REF NO SB4
TIME	5:35:18 PM				JOB NUMBER 25x302		Washington State Department of Transportation	I-5 DIKE ACCESS ROAD BRIDGE BRIDGE DECK AND EXPANSION JOINTS	
DATE	6/21/2023				CONTRACT NO.	LOCATION NO. XL6568			SHEET 29 OF 30 SHEETS
PLOTTED BY	MinnicN							STAGING PLANS - STAGE B	
DESIGNED BY	N. MINNICK								
ENTERED BY									
CHECKED BY									
PROJ. ENGR.	P. REYES								
REGIONAL ADM.	C. FRANCIS	REVISION	DATE	BY			P.E. STAMP BOX / DATE	P.E. STAMP BOX / DATE	

LEGEND

- EXISTING EDGE LINE
- EXISTING MEDIAN EDGE LINE
- EXISTING OUTSIDE EDGE LINE
- EXISTING LANE LINE
- CURB OF BRIDGE
- TEMPORARY BARRIER
- TEMPORARY LANE LINES
- GUARDRAIL
- A — TRAFFIC SENSOR
- CLASS A TRIPOD-MOUNTED SIGN LOCATION (5' MIN HEIGHT)
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- PCMS1 — PORTABLE CHANGEABLE MESSAGE SIGN
- TRAFFIC SAFETY DRUM
- CLASS A SIGN LOCATION
- SMART SEQUENTIAL ARROW SIGN
- TTR1 — PORTABLE TRAVEL TIME READER
- RADAR SPEED DISPLAY SIGN (RSDS)

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50-75	40	80
45	30	60

MP 22.54
END SHIFTING TAPER
END LANE REDUCTION
END REMOVING EDGE LINES - PAINT
END REMOVING LANE LINES - PLASTIC
END REMOVING RAISED PAVEMENT MARKER
END TEMPORARY PAVEMENT MARKING - SOLID EDGE LINE - WHITE

MP 22.52
TTR2

MP 22.52
W21-30B

6C
6C
6C
6C
48"
TRUCKS ENTERING AND LEAVING HIGHWAY
48"
W21-30B

MATCH LINE 10 TO SHEET 17

TTR2

12'
12'
12'

MP 22.63
END TEMPORARY BARRIER
BEGIN SHIFTING TAPER

MP 22.54
END RUMBLE STRIP REMOVAL

MP 22.52
END TEMPORARY PAVEMENT MARKING - EDGE LINE - YELLOW
END TEMPORARY PAVEMENT MARKING - SOLID LANE LINE - WHITE

MP 22.50
G20-2A & G24-501

MP 22.47
GATED R2-1 & R2-2P

48"
END ROAD WORK
24"
G20-2A

48"
FOR PROJECT INFORMATION
1-800-###-####
WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
36"
G24-501

36"
R2-1 (B/W)
SPEED LIMIT 70
48"

R2-2P (B/W)
TRUCKS 60
36"

NOT TO SCALE

FILE NAME	G:\444304\04 - Design\02 - Design Projects\D00527K - I-5 Dike Access Road Bridge - Bridge Deck and Expansion Joints\20-CADD-Plans\20-11 PS&E Sheets\XL6568_PLAN SHEETS.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. 0051(321)	
TIME	5:35:28 PM							
DATE	6/21/2023				JOB NUMBER 25x302			
PLOTTED BY	MinnicN							
DESIGNED BY	N. MINNICK				CONTRACT NO.		LOCATION NO. XL6568	
ENTERED BY								
CHECKED BY								
PROJ. ENGR.	P. REYES							
REGIONAL ADM.	C. FRANCIS	REVISION	DATE	BY				

P.E. STAMP BOX — DATE

P.E. STAMP BOX — DATE

Washington State Department of Transportation

I-5
DIKE ACCESS ROAD BRIDGE
BRIDGE DECK AND EXPANSION JOINTS

STAGING PLANS - STAGE B

PLAN REF NO SB5

SHEET 30 OF 30 SHEETS

25x302_Volume2_Plans_Final_Revised_7-3[6724]

Final Audit Report 2023-07-05

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"25x302_Volume2_Plans_Final_Revised_7-3[6724]" History

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